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THE ARMY.

W. T. SHERMAN, *General of the Army of the United States.*

WAR DEPARTMENT.

W. W. Belknap, *Secretary of War.*

REPORT OF THE SECRETARY OF WAR.

WAR DEPARTMENT, November 1, 1872.

MR. PRESIDENT: A comparison of the expenditures of the War Department for the present fiscal year and the one immediately preceding, will show that the actual expenditures for the fiscal year ending June 30, 1871, were..... \$35,799,991 82
For the year ending June 30, 1872..... 35,372,157 20

Showing a reduction of..... 427,834 62
The total estimate for military appropriations for the fiscal year ending June 30, 1874, is..... \$33,801,378 78
The estimates of the Chief of Engineers are submitted separately as presented by that officer, namely: Fortifications and other works of defense..... \$8,725,000
River and harbor improvements..... 12,302,800
Public buildings and grounds and Washington Aqueduct..... 612,024
16,639,824

Since my last report there have been turned into the Treasury by surplus-fund warrant, balances of previous appropriations amounting in the aggregate to \$6,243,960. 51. Had these balances been applicable for the use of the current or ensuing fiscal year, the estimates could have been reduced very materially, as, in the item of expenses for recruiting alone, the sum of \$300,000 was returned to the Treasury, being double the amount asked for under that head for the next fiscal year. An estimate of \$2,000,000 has been submitted to meet Treasury settlements in favor of States for expenses incurred for enrolling and subsisting troops called into the United States service during the late war, under the act of July 27, 1861, and \$100,000 for payment for horses lost or destroyed while in the military service of the general Government; these being the amounts required as reported by the Third Auditor, the officer charged by law with the examination and settlement of the accounts.

The reports of the General of the Army and of the division and department commanders show that the various duties required of the Army have been performed with faithfulness. Desertsions have decreased in number, the enlightened legislation in connection with the pay of the enlisted men having contributed greatly toward that end.

It has been found impossible thus far to reduce the force in the Southern States east of the Mississippi which were engaged in the war of the rebellion. About one-sixth of the Army is located there. It is to be hoped that an improved condition of affairs in that section may permit the withdrawal of a portion of the forces.

I renew the recommendation that the extra lieutenants now authorized by law to serve as regimental adjutants and quartermasters in the artillery, infantry and cavalry regiments, be discontinued, as vacancies occur in those grades. A yearly saving, with no injury to the service, of nearly \$160,000 would thus be effected.

Through inspections, especially in connection with those branches of the service having charge of disbursements, have been ordered, and the inspector will be held responsible for any defalcation or misapplication of the public money or property which may occur within the district assigned to him, that an active vigilance on his part might have detected.

Under the recent legislation placing the control of the Freedmen's Bureau under my immediate charge, the transfer of the records, accounts, claims, checks, Treasury certificates, and property from Howard University to a building near the War Department was completed about August 3 last, and regulations for the discovery, identification, and payment of the claimants for pay, bounty, prize money, or other monies due to colored soldiers, sailors, or marines, or their legal representatives now residing or who may have resided in any State in which slavery existed in the year 1860, have been framed and put into execution.

The examination by the Bureau of Military Justice of the records of trials occurring in the different military departments, brings constantly before it what is felt to be a most serious defect in the administration of justice, and a most positive injury to the service; which is, the inequality of sentences adjudged by different courts for identical offences. Desertion, for instance, receives in one department a punishment of two, three, four, and even five years' confinement at hard labor, while, in another, a sentence providing but for one year's imprisonment is deemed an ample expiation, and this in cases which, from the trial records, appear to be in all respects deserving of the same proportion of punishment. Prisoners thus differently treated are often brought together, when, by comparison, the injustice wrought is made manifest to the sufferers, and the result naturally is to harden rather than reform the culprits.

Necessarily large discretion must be reposed in courts-martial, as to the measure of punishment required by the demands of justice, in a vast number of cases brought before them; yet the opinion is entertained that the service would be greatly benefited, and its *morale* increased,

by the adoption of a code providing specific penalties for well-defined offences, with a minimum and maximum limitation to meet first offences and the cases of persistent offenders. By the pursuit of this plan, it is believed the character of certainty of execution would attach to all sentences, adding largely to their corrective power, and relieving the Executive from the numerous applications for clemency that are now received.

The absence, too, of proper places of confinement for the enforcement of sentences is pregnant with deplorable results. It has led, through the necessity of the case, to the designation, by this Department, of the different State penitentiaries as military prisons, and prisoners guilty of purely military offences are there compelled to associate with the vilest felons in the country, and subjected to all the humiliating and degrading disciplines of those institutions. Many men who might, under different treatment, again become useful soldiers, are thus yearly added to the criminal classes by the stigma of infamy attached to them, and the demoralizing influence of their prison associations. In connection with this subject, I would again call attention to the report of the board of officers who investigated the subject of military prisons in Canada, in the summer of 1871, which report was transmitted to Congress at its last session.

Under the existing laws there is no warrant or provision for the arrest by civilians of deserters from the Army, and when such arrests are made in consequence of awards offered by the military authorities, the civilian is compelled to assume all the responsibility of his act, and the expense and vexation which may arise from a suit. As a natural consequence, the deserter, in a measure, enjoys immunity from arrest by the citizen, and it is therefore recommended that legislation be had looking to the protection and defence by the United States of persons against whom suit shall be instituted for such arrest.

The expenditures for the service of the Quartermaster's Department during the year have been \$12,517,631.37.

The legislation which requires a separate account with each of the many different heads of appropriation to be kept by every disbursing officer, complicates accounts, increases the amount of capital lying idle to the credit of these officers, and makes larger appropriations necessary than under the old system, inasmuch as every disbursing officer needs a working balance on account of every appropriation, instead of a single working balance applicable to all appropriations.

The examination and settlement of accounts of the war, a work of vast labor, has at length been completed, and this business is now brought up to date. All accounts for money and property prior to 1871 have been examined and transmitted to the Treasury for final settlement. An improved and simplified system of rendering and settling money and property accounts, which was introduced during the year, has greatly aided in this result.

The number of cavalry and artillery horses purchased during the year is estimated at..... 3,277
Mules for the trains..... 209
The number of horses in service is..... 9,720

" of mules..... 8,758

Much of the clothing and equipage left on hand at the close of the war has been used; a large quantity of it has suffered from the effects of time and decay, and has been sold. The changes in the uniform and dress of the Army, recommended by a board of officers convened with reference to that subject, were, with some modifications, approved, and the new clothing is being manufactured as rapidly as possible. The uniform adopted is believed to be a great improvement, and will, it is hoped, give general satisfaction in the Army.

The expenditures for clothing during the past year have been \$667,529.63, and the Quartermaster's Department has deposited in the Treasury, from sales of clothing and equipage during the year, \$1,843,831.40, which sum is not available for current use.

Transportation by railroad has cost..... \$1,300,000 00

Of this \$800,857 was over the Pacific Rail-

roads.

Wagon transportation..... 1,100,000 00

Water transportation..... 626,373 52

Stage transportation..... 48,975 84

And the amount paid on account of purchase of transportation animals, purchase and repair of army and spring wagons, and carts, harness, etc.; hire of teamsters, wharfage, tolls, was.... 924,650 64

Making a total of..... 4,600,000 00
exhausting the appropriation.

The cost of construction and repair of military buildings has been \$385,925. Ninety-five new buildings have been erected at military posts, at a cost of \$240,853, and \$15,000 has been expended upon wharves.

The sum of \$100,000, set aside for the purpose of constructing a depot at San Antonio, Texas, has, under the operations of the law of May 18, 1872, been returned to the Treasury, and the work stopped. The city of San Antonio gave a site for this building, the title to which has been finally approved by the Attorney-General. It is recommended that the money be re-appropriated, and that the special authority required by that law for construction of a permanent depot building be given. Rents are costly, and there is much need of a central depot for the troops in that great State.

One hundred and thirty-eight thousand one hundred and twenty-two dollars and seventy-five cents have been collected from the indebted Southern railroads, and unsettled accounts on file will probably increase this sum

about \$230,000, making in all \$370,000, derived from these accounts during the year. The balance still due at the end of the year was \$4,734,442.43.

Under the law of July 4, 1864, for relief of loyal citizens in certain loyal districts, the Quartermaster-General has examined and transmitted to the accounting officers for settlement 665 claims for quartermaster's stores taken during the war, amounting, as allowed, to \$367,102.72; 274 others have been rejected, amounting to \$396,100.75. There are 10,351 claims under this law still on file, stated at \$6,857,006.56, but a large proportion of these are probably unjust.

The 74 national cemeteries now contain the remains of 317,962 persons. All but 16 of these cemeteries have been permanently inclosed, or are being inclosed under contracts now in operation. The Gettysburg cemetery has been transferred to the care of the War Department, and accepted under the resolution of Congress of July 14, 1870. The superintendents of national cemeteries have been classified with reference to the importance of their respective charges. There were 59 superintendents at the close of the year.

As legislation is needed in connection with the cemetery near the City of Mexico, purchased in accordance with the act of September 28, 1850, it is again recommended that a special act be passed placing this cemetery on the same basis with other cemeteries, with a duly appointed superintendent, and that a portion of the regular appropriation for national cemeteries be made applicable for use upon the one in question.

The condition of the tenure of the sites of military posts in Texas, to which the attention of Congress was called last year, remains unchanged. The land is private property, generally located by speculators at low rates, immediately after their occupation by troops. Extravagant rents are demanded, and as the law now forbids the War Department to purchase lands without the authority of Congress, the officers of the United States are in the position of trespassers, and the claims on account of these lands are unsettled. An act authorizing the Secretary of War to acquire titles to sites already occupied, and to purchase such as may hereafter be required on this remote frontier, is needed to remedy this evil.

The sources and methods of supply for the Army have since the war been gradually brought into close conformity with the customary usages governing in commercial transactions.

A terrible conflagration having laid in ashes a large part of the city of Chicago, the Subsistence Department was, under telegraphic instructions to General P. H. Sheridan, called upon to furnish and distribute food to the sufferers by the calamity; accordingly supplies were hurried forward from St. Louis and Cincinnati; but the munificent contributions by the people for their suffering fellow-citizens soon poured into Chicago from all quarters so freely that the sum of \$5,705.83 only was expended for this purpose by the Subsistence Department. The supplies sent to Chicago were, however, most opportunely there to meet a call for aid from the Governor of Wisconsin for the sufferers by the forest fires, which swept over a portion of that State. For this purpose, Lieutenant-General Sheridan, under my authority, caused food, valued at \$30,836.11 to be issued to Governor Lucius Fairchild, "on condition that the State of Wisconsin will account for the stores at their value, if required to do so hereafter."

Subsistence supplies, valued at \$89,048.12, have been issued to Indians of the various tribes visiting the military posts on the frontier, or in their respective nations, no part of which amount is returned to the appropriation for the subsistence of the Army, and issues of subsistence stores to Indians have also been made to meet special emergencies to the amount of \$103,137.99.

It is recommended to set a future, but not distant day, as a limit after which claims on the Subsistence Department under the act of July 4, 1864, shall not be presented to or received, and another day, not later than twelve months thereafter, for the termination of all action by that office on claims under this law.

The want of an assistant to each post-commissary is represented by the Commissary-General to be the greatest evil with which the Subsistence Department has now to contend in its important ministrations. To remedy it, I recommend that Congress authorize the appointment of as many commissary-sergeants as the service may require, not to exceed one for each military post or place of deposit of commissary stores, to be selected from such non-commissioned officers who shall have faithfully served as such for three years, and in the Army at least five years, whose duty it shall be, under the orders of the proper officers of the Subsistence Department, to assist in receiving, preserving, issuing, selling, and duly accounting for, under proper regulations, all stores pertaining to the Subsistence Department under their charge, and who shall receive for their services the pay and allowances of ordnance sergeants. This would make a small addition to the enlisted force of the Army, but would lessen the total expense of the Government for its support, as by the constant care and skill of well-selected commissary-sergeants the large quantities of stores now lost for want of such care and skill would be saved for issue.

The monthly reports of sick and wounded received during the year represent an annual average mean strength of 24,101 white and 2,494 colored soldiers. Among the white troops the total number of cases of all kinds reported on the sick list was 47,575; the total number of deaths reported was 367. Among the colored troops the total number of cases reported was 3,514; the number of deaths from all causes reported was 54.

The Army Medical Museum continues to receive

valuable contributions, which are at once properly prepared, mounted, and their histories entered in the descriptive catalogue. The number of visitors to it during the year was over 17,000, many of whom were in search of information not attainable in any other quarter. Memoranda and photographs have been furnished to assist in the decision of cases of applicants for the benefits of the various acts of Congress in relation to maimed and disabled soldiers and pensioners; and as the extent of this collection becomes better known, its usefulness is widely increased, not only by affording opportunities for study to the professional man, but also in promoting the ends of justice in supplying evidence for comparison in criminal trials.

I unite with the Surgeon-General in the recommendation that the necessary legislation be had to provide for the publication of an edition of one thousand of the catalogue and tables of the anatomical section of the Army Medical Museum.

The first part of the Medical and Surgical History of the War was in a State of sufficient forwardness to lay before Congress near the close of the last session. By the wording of the act making appropriation for the continuation and completion of this work, its distribution is still to be ordered by Congress. The report of the Medical Statistics of the Provost Marshal-General's bureau is now in the hands of the Congressional printer, and is in process of being printed.

My previous reports have called the attention of Congress to the large number of vacancies at present, fifty-nine, existing in the Medical Corps, and the injury to it and the service resulting from the prohibition of appointments and promotions. It would require many years to fill the vacancies now existing, as the number of successful candidates rarely exceeds eight or ten in any one year. Numbers of the most desirable candidates, after waiting years for examination, have established themselves in civil practice. With the Army at its present standard, distributed as it now is, there is a constant and absolute necessity for a medical corps of the full number established by the act of Congress approved July 28, 1866.

The legislation of Congress at its last session has tended materially to encourage and improve the condition of the rank and file of the Army. The pay-bill carries the system of retained pay to those of all ranks, and no one can doubt the good effect of such a system.

The appropriation for the manufacture of arms for the current year (1872-'73) is limited in its application to such system of breech-loading arm as may be selected by a board of officers, now in session. Should the selection be so long delayed as to cause an unexpended balance of the appropriation to remain on hand at the close of the fiscal year, its re-appropriation is recommended. The system being once adopted, arms sufficient to supply the Army and militia should be at once manufactured, and a large reserve should be accumulated year by year, for the exigencies of war, and to this end, liberal appropriations will be required.

Reports from the field are all favorable to the use of revolvers using metallic cartridges.

Five thousand sets of new infantry equipments, combining the knapsack, haversack, canteen, cartridge-box, waist-belt, and the bayonet-scabbard into one system, have been made during the year, and issued to the troops for experimental trial. A sufficient sum is asked to supply the service with these equipments.

The board on heavy ordnance, authorized by the act of June 6, 1872, have made their report, and measures have been taken to carry out their recommendations. The procurement and trial of the guns recommended by them, will probably consume the whole of the year 1873.

A moderate sum is estimated for the procurement of cast-iron smooth-bore guns and iron carriages for the fiscal year. Nearly 800 of such guns, besides 300 mortars, are still needed for our forts.

Such of the arsenals east of the Mississippi river as can be spared should be sold, and the proceeds applied to the establishment of a large arsenal of construction and repair on the Atlantic coast, and the erection of suitable depots for the storage of the powder and nitre belonging to the department. The means of rapid communication of modern times obviates the necessity of having an arsenal in almost every State of the Union, and the consolidation of several of them into one establishment would result in great economy to the Government, and promote efficiency. A proving and experimental ground for heavy ordnance is much required, and the purchase of a suitable site is recommended. The grounds at present used, at Old Point Comfort, Virginia, are inadequate to the wants of the Ordnance Department.

Suspension of the sale of certain arsenals has been directed until the opening of Congress, in order that the law requiring the sale may be so amended as to enable the department to save the property from sacrifice in case of combinations of bidders. The act directed the sale of Apalachicola arsenal, but that property had previously been granted by Congress to the State of Florida. The provision directing its sale should be repealed.

Some plan for settling the long-disputed claims for royalty on the arms that have been altered at Springfield armory should be devised, and the attention of Congress is called to such legislative enactments as tend to deprive the Government of the inventive ingenuity of its officers and employees, by preventing them from receiving royalty or participating in profits derived from inventions made by them while in the United States service.

The Chief of Ordnance calls attention to the necessity for the repeal of the law prohibiting promotions and appointments in that corps. Congress by an act passed at its last session relieved the Corps of Engineers from the operation of the act approved March 3, 1869, and in my judgment it is now advisable that all of the staff corps of the Army, affected by the law of March 3, 1869, should have the same privilege extended to them.

During the past year the Corps of Engineers has been engaged upon the works for the defence of our coasts; upon river and harbor improvements and the surveys for them, and for the protection of the navigable waters;

of the United States against deterioration, whether from bridging or other cause; upon the geodetic and hydrographic survey of the lakes; upon surveys for the defense of the coast; upon military surveys and reconnaissance in the interior; upon geographical and geological explorations; upon public buildings and grounds in the District of Columbia; upon the construction of lighthouses; and upon the demarcation of the boundary between the United States and Great Britain.

The work upon our coast defences and fortifications has been prosecuted with vigor, and already a large number of positions for guns and mortars of the largest calibres, to be mounted behind sand parapets, have been provided, while others are in an advanced state of construction. These works should be continued, as they are the basis of our harbor protections, and are essential for the efficacy of the accessory defences, especially of torpedoes and channel obstructions, which form a part of our own system of defence.

The Battalion of Engineers, in its reduced organization, numbers 315 men, but retains its marked efficiency in drill and discipline, and furnishes the instruction to the cadets at the Military Academy in practical military engineering, while at Willett's Point it forms the school for the torpedo-defence of our harbors, and the guards and workmen for the distribution, care, and preservation of the bridge-trains and engineer equipments of the Army. The appropriations asked for this depot and post are recommended to Congress, while the repeated recommendation of the Chief of Engineers, for the repeal of the 7th section of the act of July 13, 1866, taking from engineer soldiers the per diem granted to other troops, is approved.

The torpedo experiments, made under the immediate direction of Major H. L. Abbot, commanding engineer battalion, have been brought so far to satisfactory conclusion as to enable us to devise a plan of torpedo defence in connection with the fortifications, simple in its working, certain in its application, and effective in its results, while at the same time our own shipping will not be endangered. An estimate for providing means to apply the system to a few of the principal harbors is submitted in the annual estimate for fortifications.

The river and harbor works, and the many surveys annually directed to be made in extending the system of improvement, have been carried on with skill, energy, and economy. The increased security and facility to navigation which these works of improvement have afforded, though many of them are only partially completed, have saved to commerce many times the amount of the sum expended on the works; and the increase of commerce, with greater depth of channels, greater security in their navigation, and the saving of time in their use, adds millions annually to the wealth of the country, and increases the resources of the Government. For further information respecting these improvements and surveys, reference may be made to the report of the Chief of Engineers, which contains detailed account of the steps taken to carry out the provisions of the river and harbor bills, and the progress and condition of these works, as well as of the public buildings and grounds in Washington, and of the Washington Aqueduct, works which have been carried on in a highly creditable manner.

The river and harbor bill, approved June 10, 1872, appropriated the sum of \$145,000 for payment to the Green Bay and Mississippi Canal Company for so much of its property and rights of property in and to the line of water communication between the Wisconsin River and the mouth of the Fox river, as were reported by the Secretary of War to the House of Representatives on the 8th March, 1872, to be needed. In conformity with the requirements of the act referred to, the Green Bay and Mississippi Canal Company transferred the property to the United States, and the sum of \$145,000 was paid to the company on the 24th of September last.

The construction of the bridge across the Mississippi river at Rock Island has been completed, and the bridge will be immediately opened for railroad and wagon-road use.

In conformity to the requirements of the two acts relating to bridging the Mississippi river, the one approved April 1, 1872, the other approved June 4, 1872, the proper site for the bridge at La Crosse and vicinity has been determined.

The river and harbor bill approved June 10, 1872, directed the Secretary of War to report to Congress, at its next session, or sooner, if practicable, the condition of the canal at the Falls of the Ohio river and the provisions necessary to relieve the canal from incumbrance, with a view to such legislation as will render the same free to commerce at the earliest practicable period. This report will be completed in time to be submitted to Congress at its meeting in December.

The survey of the lakes has been conducted in a very satisfactory manner; the survey of Lake Superior having been completed, and that of Lake Michigan having been extended so far as to require probably but one more working season to complete it. The operations in other portions of the field of survey, comprising Lakes Erie, Ontario, and Champlain, and the Saint Lawrence river, have been equally successful, as have been the meteorological and lake-surface observations, which extend over the whole lake-region.

The geological exploration between the Sierra Nevada and eastern slope of the Rocky Mountains will probably be completed by the close of the present season for field operations. The results of this work are of the very highest value in the departments of geology, topography, and mining engineering. The exploration in Nevada, Utah, and Arizona was continued until December of last year, when a preliminary report of the results, affording valuable information for mining as well as for military operations and to immigrants, was submitted to Congress and published. The field-work, which, in addition to the usual subjects of observation, comprises the careful determination of an astronomical base, was resumed this summer as soon as the appropriation was available.

In addition to these special works of exploration, the officers of engineers serving on the staff of generals commanding divisions and departments have made important

reconnoissances, such as that of the Upper Yellowstone river and that of the Uintah Mountains, and have made many contributions to the topography of the Territories of the United States.

In compliance with the act approved March 19, 1872, authorizing the survey and marking of the boundary between the territory of the United States and the possessions of Great Britain from the Lake of Woods to the summit of the Rocky Mountains, four officers of Engineers were detailed for that purpose and ordered to report to the Secretary of State for duty. The survey is now in progress.

The duties of the Signal Office in observations and reports for the benefit of commerce and agriculture have been continued throughout the year with gratifying success. Stations have been maintained at each of the principal lake, sea-port, and river cities. The display of bulletin reports, of reports at the river stations, giving the rise and fall of the principal rivers, of the large weather-maps showing, by changing symbols, the meteoric changes at the different reports; and, finally, at designated stations, the exhibition of day or night signals, on occasions of supposed especial danger, has been regularly made. Since the date of the last annual report ten additional stations have been established within the United States.

A comparison of the tri-daily forecasts, or "probabilities," as they have been styled, with the meteoric condition afterward reported, and, so far as known, has given an average of 69 per cent, as verified up to November 1, 1871. Since that date, to the present time (October 1, 1872), the average of verifications has been 76 8-10 per cent.

The difficulty of telegraphic communication with the stations was greatest, and was most seriously felt during the months of July and August. It then not unfrequently happened that the most important and widespread of the press "probabilities," i.e., those drawn at midnight from the midnight reports, were made in the absence of any current telegraphic information at that hour due from the observers west or south of the Alleghanies. It is on this section on which the office is most dependent for the intelligence which suggests the meteoric changes impending in the Eastern, Middle, and Southern States, and upon the Lakes.

The practical results of this branch of the service, with all its errors and imperfections, can be summed up, it is believed, in the statement that since the inauguration of its duties no great and continuous storm has traversed the territory of the United States, or raged along the length of its lakes, its gulf or sea-coast shores, as in their course such storms have sometimes done, without fair and general premonition given at the great majority of the points endangered to any who cared to seek or heed them.

Since the date of the last annual report, arrangements were made with the Chief of the Dominion Meteorological Bureau of Canada for an exchange of reports with his office as rapidly as the system may extend in the Dominion. Arrangements of a similar description are contemplated for the exchange of observations by telegraph with various points in the West India Islands. These arrangements will be carried into effect, if possible, before the opening of the stormy spring season.

Since January 1, 1872, statements of the changes in the depths of water in the principal western rivers, being in direct relation to the meteoric changes, have been reported daily from all stations established upon those rivers. These reports are carefully prepared, and have been received with a marked degree of interest. It is hoped that as the number of stations increases and communication with the proper authorities is organized, a portion of the great problem of the protection of the river commerce from ice and freshets, and of the lower river levees from breakage and overflow, with the consequent disasters, will be solved.

Under the act approved June 10, 1872, the service before technically limited to the lakes and sea-coasts was extended throughout the interior, and many of the agricultural societies in the country have been requested to appoint permanent committees to confer with the Chief Signal Officer, and to take, in conjunction with him, such steps, or to recommend such action, as might be deemed desirable to accomplish the objects of that act. In addition to the committees above referred to, thirty-eight boards of trade and chambers of commerce have standing meteorological committees, which are in direct communication with the Chief Signal Officer.

A personal visit to West Point and inspection of the operations of the Academy in June last, and the report of the Board of Visitors, whose investigations were very thorough, disclosed a satisfactory state of proficiency in discipline and study. Since my last annual report there has been no breach of discipline or impropriety on the part of cadets calling for the exercise of higher authority than that of the Superintendent and Academic Staff.

The number of failures to master the academic course, including original rejections, were 87, the number of admissions 95; the total number of cadets now at the Academy is 240. There are 53 vacancies, caused by failures upon preliminary examinations, discharge of cadets for deficiency, and the failure of Congressional Representatives to select suitable candidates for the past September examination. The standard of proficiency in the corps of cadets has much improved, but great obstruction to the usefulness which the Academy might otherwise attain in fitting scientific and highly-educated young men for the public service, is experienced because of the large amount of time necessarily expended in giving new cadets a thorough knowledge of the mere elementary branches of learning, which they should have acquired before entering the Academy. Under the present system a large percentage of the candidates who seek admission to the Academy fail in their preliminary examination, or are found incapable of mastering the academic course during the first year. Many of those who go to West Point with the prestige of high scholarship, obtained elsewhere, fail, under examination, in the very rudiments of an education. That such failure cannot be charged to a too severe examination is shown by the

fact that the qualifications demanded of candidates are less than those established by perhaps a majority of the higher scholastic institutions of the country; and the examinations are not conducted more rigidly than is absolutely necessary. A considerable modification of the existing mode of selection of cadets seems to be demanded, as the only effectual remedy for this evil; and in this connection attention is invited to the report of the Superintendent of the Academy, which furnishes some interesting data on the subject of admission.

The department of Philosophy is very destitute of necessary apparatus for instruction, but it is hoped Congress will supply this important want through liberal appropriations.

The subject of the revision of the academic regulations is now under consideration, and many changes which experience has shown to be advisable will be made.

Legislation by Congress is also needed in aid of the Military Academy band, which is now the only one provided for by law, and the pay of which experience has shown to be wholly insufficient. Attention is invited to the recommendation of the Superintendent for the increase of its numbers and pay.

It is a matter of great satisfaction that an appropriation liberal in amount has been made by Congress for the erection of a fire-proof building, a portion of which is for the use of the War Department. The necessity for a safe depository for the valuable records, now scattered in insecure localities, renders the speedy erection of this building a matter of great interest to the country.

WILLIAM W. BELKNAP,

Secretary of War.

ADJUTANT-GENERAL'S OFFICE.

Brigadier-General E. D. Townsend, Adjutant-General.

WAR DEPARTMENT,

ADJUTANT-GENERAL'S OFFICE,

WASHINGTON, D. C., Nov. 7, 1872.

General Orders No. 95.

Hereafter officers detailed on recruiting service will be paid mileage by the Pay Department upon joining rendezvous, after reporting to superintendents when first detailed, and upon returning to their proper stations, after conducting recruits from rendezvous to depot or from depot to regiments.

For all other journeys on recruiting service, such as visiting and returning from branch rendezvous, only actual personal transportation will be allowed, which will be obtained from the Quartermaster's Department.

The items of actual transportation to which an officer so travelling is entitled are: a first-class ticket over the route, a sleeping car ticket, and a ticket to secure passage for himself through cities where such transportation is not included in his trip ticket. No portage or expenses for board are allowed.

By order of the Secretary of War:

E. D. TOWNSEND, Adjutant-General.

ABSTRACT OF SPECIAL ORDERS

Issued from the Adjutant-General's Office for the week ending December 2, 1872.

Tuesday, November 26.

The leave of absence on surgeon's certificate of disability granted Captain Edmond Butler, Fifth Infantry, in Special Orders No. 174, October 29, 1872, from headquarters Department of the Missouri, is extended five months on surgeon's certificate of disability, with permission to go beyond sea.

The leave of absence on surgeon's certificate of disability granted Captain Alexander Moore, Third Cavalry, in Special Orders No. 190, October 28, 1872, from headquarters Department of the Plate, is extended five months on surgeon's certificate of disability, with permission to go beyond sea.

The leave of absence granted Second Lieutenant Eugene O. Fecet, Second Artillery, in Special Orders No. 191, October 18, 1872, from headquarters Military Division of the Pacific, is extended one year, with permission to go beyond sea.

Leave of absence for thirty days is granted Assistant Surgeon D. Weisel.

Wednesday, November 27.

The leave of absence granted Captain William W. Webb, Fourth Cavalry, in Special Orders No. 192, October 28, 1872, from headquarters Department of Texas, is extended to May 1, 1873.

The resignation of Captain William W. Webb, Fourth Cavalry, has been accepted by the President, to take effect May 1, 1872.

Discharged.—Private H. R. Kuapp, alias Henry Reynolds, Company I, Sixth Infantry; Private Alfred H. Herme, Company B, Thirteenth Infantry; Recruit Walter Cheeseman, General Service U. S. Army.

First Lieutenant John H. Mahnken, Eighth Cavalry, is appointed to act as inspector on certain unserviceable ordnance stores and recruiting property for which Captain E. V. Sumner, First Cavalry, is responsible, and clothing, camp and garrison equipage, and commissary property, for which First Lieutenant A. G. Forse, First Cavalry, is responsible; all at the rendezvous of Captain Sumner, New York city.

The extension of leave of absence granted Second Lieutenant Levi P. Hunt, Tenth Cavalry, in Special Orders No. 100, October 30, 1872, from headquarters Military Division of the Missouri, is further extended sixty days.

[No Special Orders were issued from the Adjutant-General's office on Thursday, the 28th of November (Thanksgiving Day) or on Saturday, the 30th of November, 1872.]

Friday, November 29.

The leave of absence granted Post Chaplain Dudley Chase in Special Orders No. 174, September 17, 1872, from headquarters Military Division of the Pacific, is extended thirty days.

The stoppage of pay directed by paragraph 8, Special

Orders 268, November 9, 1868, from this office, against Captain D. R. Ransom, Third Artillery, is removed, and Captain Ransom is relieved from the payment of the balance (\$80.46) of the amount for which he was held responsible to the United States on account of deficiencies in subsistence stores for which the stoppage was ordered.

Second Lieutenant Eugene O. Fecet, Second Artillery (now in this city) will report in person to the Chief Signal Officer of the Army for duty.

The leave of absence granted Captain Henry Clayton, Seventeenth Infantry, in Special Orders No. 212, October 27, 1872, from headquarters Department of Dakota, is extended until December 31, 1872.

The resignation of Captain Henry Clayton, Seventeenth Infantry, has been accepted by the President, to take effect December 31, 1872.

On the recommendation of the Chief of Ordnance, Captain Isaac Arnold, Ordnance Department, is relieved from duty at Allegheny Arsenal, Pennsylvania, and will report for duty at Benicia Arsenal, California. Captain Arnold will comply with this order under instructions from the Chief of Ordnance.

Leave of absence for four months, from December 1, 1872, is granted Assistant Surgeon Charles Styer.

Discharged.—Recruits Frank C. Wakor and Nathan C. Melton, Mounted Service U. S. Army; Recruit James F. Kerr, Mounted Service U. S. Army.

The leave of absence granted Captain Caleb H. Carlton, Tenth Cavalry, in Special Orders No. 183, October 15, 1872, from headquarters Department of Texas, is extended three months.

The extension of leave of absence granted First Lieutenant L. E. Campbell, Twenty-second Infantry, in Special Orders No. 231, November 19, 1872, from headquarters Department of Dakota, is further extended five months.

The leave of absence granted Second Lieutenant V. A. Goddard, Sixth Cavalry, in Special Orders No. 159, October 1, 1872, from headquarters Department of the Missouri, is extended until his tendered resignation shall have received action.

The following transfers of troops will be made under the direction of the commanding general Military Division of the South: The two companies of the Sixth Cavalry now serving in the Department of the Gulf, to Fort Riley, Kansas, to join the headquarters of the regiment; two companies of the Seventh Cavalry, to replace the two companies of the Sixth Cavalry in the Department of the Gulf; the Fourth Infantry to Little Rock, Arkansas, the commanding officer to report by letter on arrival to the commanding officer Department of the Gulf.

Transferred.—Private Robert White, Company F, Forty-third Infantry.

Monday, December 2.

Discharged.—Sergeant Gustave A. Dandelet, General Service U. S. Army; Private Clifton R. Wooldridge, General Service, U. S. Army; Private Albion P. Babbitt, alias Morris Melville, Company D, Seventeenth Infantry; Chief Musician Joseph Nobles, Fourteenth Infantry; Private Charles A. Howard, Company I, Third Infantry.

Dishonorably Discharged.—Private Thomas Scannel, United States Military Academy detachment of Cavalry.

CHANGES OF STATIONS.

The following is a list of the changes of stations of troops reported at the War Department since last report:

Company I, Sixth Cavalry, from Oxford, Miss., to Fort Riley, Kas.
Company K, Sixth Cavalry, from Meridian, Miss., to Fort Riley, Kas.
Companies C and H, Second Artillery, to Fort McHenry, Md.
Companies D, F, G, and I, Second Artillery, to Raleigh, N. C.
Companies E and L, Second Artillery, to Fort Macon, N. C.
Company M, Second Artillery, to Fort Johnston, N. C.
Company H, Third Artillery, from Fort Wood, New York Harbor, to David's Island, New York Harbor.
Company E, Fourth Artillery, to Fort Stevens, Oregon.
Company F, Fourth Artillery, to Alcatraz Island, Cal.
Companies B, C, F, and H, Eighth Infantry, to Omaha Barracks, Neb.
Company E, Nineteenth Infantry, from Holly Springs, Miss., to Jackson Barracks, La.

Posts Established.—Fort McKeen, D. T., name changed to Fort Abraham Lincoln, D. T.
Fort Cross, D. T., name changed to Fort Seward, D. T.
Post Discontinued.—Holly Springs, Miss.

MILITARY DIVISION OF THE MISSOURI.

Lieutenant-Gen. P. H. Sheridan : Hdq'trs Chicago, Ill.

New Posts.—In compliance with instructions from the Secretary of War, the new post now known as "Fort McKeen," situated on the west bank of the Missouri river at the Northern Pacific Railroad crossing of the same, will be known as "Fort Abraham Lincoln," and the new post now known as "Fort Cross," situated near the Northern Pacific Railroad crossing of James river, Dakota Territory, will be known as "Fort Seward."

Major A. Baird, assistant inspector-general U. S. Army, under date of November 14, is announced as inspector-general of this military division.

DEPARTMENT OF DAKOTA.

Brigadier-General Alfred H. Terry : Headquarters, St. Paul, Minn.

A General Court-martial is appointed to meet at Fort Pembina, D. T., December 26. Detail for the court: Captains Loyd Wheaton, A. A. Harbach, Twentieth Infantry; Assistant Surgeon Ezra Woodruff, U. S. A.; First Lieutenant Paul Harwood, and Second Lieutenant C. H. Ribbel, Twentieth Infantry. Second Lieutenant John Bannister, Twentieth Infantry, judge-advocate.

Twentieth Infantry.—Par. 1, S. O. No. 191, c. s., from department headquarters, November 23 was so amended as to assign First Lieutenant W. R. Maize to duty, to date October 1, 1872, the date he assumed command in accordance with verbal instructions of the commanding officer of Fort Abercrombie, D. T., of a detachment of

Company D, Twentieth Infantry, en route from Fort Abercrombie to Fort Wadsworth, D. T.

Twenty-second Infantry.—General Field Orders issued from headquarters Twenty-second Infantry, dated in the field, Cabin Creek, M. T., September 1, and general orders issued from headquarters of the regiment at Fort Sully, D. T., announce with feelings of deep sorrow and regret to the regiment the death of Captain George H. Cram, at Ponca Agency, D. T., August 5, and also of First Lieutenant Lewis D. Adair, October 5. Colonel Stanley, in announcing these deaths in orders, says:

"Captain Cram, though a young man, had, during the late war, a very distinguished career. Entering the service as a captain in the Ninth Kentucky Volunteer Infantry, he rose through the successive grades to the colonelcy of the same regiment, and during the arduous and stirring campaigns of Atlanta he commanded his brigade to the perfect satisfaction of his superiors, and was several times engaged in severe combats with the enemy. Very few officers have experienced the same extent of active campaigning, or been engaged in so great a number of battles. He was twice wounded in battle, and was brevetted brigadier-general of volunteers for gallant conduct in the great battles of Shiloh, Stone River, Missionary Ridge, and campaign of Atlanta. In this regiment Captain Cram was well known to be an excellent officer, and as a genial gentleman and pleasant companion he had no superiors. In him we have lost one of our brightest ornaments. Let us treasure his memory and emulate his example." Leave of absence for thirty days was granted First Lieutenant B. C. Lockwood November 23.

"First Lieutenant Lewis D. Adair was wounded by Indians October 4, fifteen miles from Heart Butte, on Heart river, while on duty with his company as escort to engineers of the Northern Pacific Railroad Survey. This officer was born in Ohio, and entered the military service as captain of volunteers from that State early in the war of the Rebellion, and served with distinction throughout the entire war, and at one time commanded his regiment. Distinguished in his profession, he received the appointment of first lieutenant in the Twenty-second Infantry in 1866, since which time he has served continuously with his regiment on the frontier. His high social qualities, his goodness of heart and excellent disposition, won for him the respect and esteem of all his acquaintance, and made him a favorite companion in our regiment. The country has lost a faithful servant, and we mourn him in death as a brother officer lost, whose place in our hearts cannot well be filled." The usual badge of mourning was ordered to be worn by the officers of the regiment for the period of thirty days.

Fort Gibson, I. T.—At 6 A. M. November 25, says a correspondent, Lieutenant-General Sheridan, Colonel M. V. Sheridan, A. C., Colonel Clarke, P. C. S., also Brigadier-General Augur and Colonel Helsbird, Dep. Q. M. G., arrived here, and after a short stay of six hours took their departure, General B. H. Grierson accompanying them, taking a special train on the M. K. and Tex. R. R. far down the road towards the Red river. General Augur, finding the quarters at this post insufficient, ordered consequently Company C, Twenty-fifth Infantry, to Fort Sill, I. T. The officers serving and on duty with the company are Captain C. F. Robe, commanding, First Lieutenant J. Paules.

Sale of Arms, etc., to Indians.—In accordance with the instructions of the Lieutenant-General commanding the Military Division of the Missouri, all orders and instructions heretofore issued by subordinate commanders in this department for the regulation of trade with Indians in arms and ammunition, are revoked, or so modified as to meet the following recommendation of the Commissioner of Indian Affairs, viz: ". . . in view of the unsettled condition and hostile attitude of a portion of the Sioux nation, I am of the opinion the sale of arms and ammunition to Indians at most of the agencies in the Territories above named should be stopped, or be placed entirely within the control of the respective Indian agents. I would therefore respectfully recommend that the department authorize this office to issue instructions to the several agents for the Sioux, and also to the agents at the Milk river and Blackfeet agencies, to notify the traders at their agencies to cease selling arms and ammunition to Indians, and to sell no more in future without a permit from the respective agents, who will be held responsible for the proper use of the arms, etc., whenever permission is granted by them to sell the same; and further, that in case any trader shall sell the articles named without such permit, his license shall be revoked, and he be turned over to the military authorities to be removed beyond the limits of the Indian country. . . ." The views contained in this recommendation having received the sanction of the proper departments of the Government, are promulgated for the information and guidance of all concerned. Post commanders are authorized and instructed to take the requisite action in all cases of violations by Indian traders of the orders of the Indian agents, which may be brought to their attention, or of which they may otherwise become cognizant. Post traders who are not regularly authorized Indian traders, are not permitted to trade in arms and ammunition with Indians. Those who are will be governed by the foregoing and such special regulations as may be established by their respective post commanders.

DEPARTMENT OF THE MISSOURI.

Brigadier-General John Pope : Headquarters, Fort Leavenworth.
Acting Assistant Surgeon T. B. Chase, U. S. Army, November 26 was relieved from temporary duty at Fort Wallace, Kansas, and ordered to rejoin his station, Fort Hayes, Kansas.

Acting Assistant Surgeon A. J. Gray, U. S. Army, November 26 was ordered to Fort Scott, Kansas, reporting to the commanding officer Southeastern Kansas for duty.

Major M. R. Morgan, Subsistence Department U. S. A., November 22 was ordered to Kansas City, Mo., on

public business. Upon completion of this duty Major Morgan will rejoin his station.

Tenth Cavalry.—Leave of absence for twenty days was granted Captain J. W. Walsh, November 26.

Fort Fred Steele, Wyoming Territory.—A correspondent wrote from the post as follows: A grand hop was given on Thanksgiving night at Fort Fred Steele, by the members of Company B, Thirteenth U. S. Infantry, and Company K, Third Infantry, and it proved quite a success. The dancing was kept up until the rays of daylight came peeping in, when all departed for their "little beds," quite pleased with their evening's pleasure. There was plenty of singing and dancing. The following composed the committee: Floor manager, Andrew Conrad; Assistant, W. M. B. Fowler. Sergeant Rooney was chairman of the music committee, the music being furnished by the Thirteenth Infantry band.

Sixth Cavalry.—Leave of absence for thirty days, on surgeon's certificate of disability, was granted Captain Sheldon Sturgeon, November 29.

DEPARTMENT OF THE PLATTE.

Brigadier-General E. O. C. Ord: Headquarters, Omaha, Nebraska.
To the Editor of the Army and Navy Journal.

SIR I enclose herewith an abstract from the reports of company target practice for the month of October, 1872, from post in the Department of the Platte.

From the interest felt on this subject by the progressing officers of the Army, I believe that the publication of a summary of the best targets made every month in all the Departments would add a valuable feature to the JOURNAL, and show how our troops and arms compare with those of other armies.

E. O. C. ORD, Brigadier-General.
OMAHA, NEB., November 25, 1872.

ABSTRACT FROM THE REPORT OF TARGET PRACTICE OF COMPANIES IN THE DEPARTMENT OF THE PLATTE, SHOWING THE BEST AND WORST SINGLE DAY'S SHOOTING IN THE MONTH OF OCTOBER, 1872.

October, 1872.	Date.	Distance of Target.	No. of shots fired.	No. of hits.	Average distance of hits from centre of target.	Regiment and company, with name of commander, and size of target.
Best Target, Cavalry....	Oct. 7	200 yds.	147	98	67-8 in.	Co. B, 2d Cav., Lieut. Norcross commanding. Target 2 1-2 by 2 1-2 feet.
Best Target, Infantry....	Oct. 28	200	162	91	7	Co. A, 13th Inf., Captain Torrey commanding. Target 72 by 24 inches.
Worst Target.	Oct. 26	300	30	1	21	Co. H, 14th Inf., Captain Atchison commanding. Target 72 by 24 inches.

HEADQUARTERS DEPARTMENT OF THE PLATTE, OMAHA, NEB., November 25, 1872.

So much of paragraph 2, S. O. No. 186, c. s., from department headquarters, as required Captain G. A. Hull, M. S. K., Quartermaster's Department, to perform the duties of acting commissary of subsistence at Camp Douglas, has been rescinded.

Acting Assistant Surgeon G. W. Towar, Medical Department, November 23 was ordered to proceed without delay to Fort Bridger, W. T., and report to the commanding officer of that post for temporary duty during the absence of Acting Assistant Surgeon Hogg. Upon the return of the latter to Fort Bridger, Acting Assistant Surgeon Towar will return to his station at Omaha Barracks.

So much of paragraph 2, S. O. No. 186, c. s., from department headquarters, as directs Acting Assistant Surgeon G. W. Towar, Medical Department, to return to his station at Omaha Barracks upon the return of Acting Assistant Surgeon A. J. Hogg to Fort Bridger, has been rescinded. Upon the return of Acting Assistant Surgeon A. J. Hogg to Fort Bridger, Acting Assistant Surgeon G. W. Towar was ordered to Fort Fetterman, reporting to the commanding officer for duty as post surgeon, relieving Acting Assistant Surgeon E. J. O'Callaghan, ordered to his station at Fort Laramie.

Acting Assistant Surgeon A. J. Hogg, Medical Department, November 23 was ordered to proceed to Cheyenne, W. T., as a witness before the civil court in session in that town. Upon being discharged from attendance before the court, he will return to his proper station.

Leave of absence for twelve days was granted Assistant Surgeon George P. Jaquette, Medical Department, November 23. Upon the return of Assistant Surgeon Jaquette to Fort Sanders, W. T., Acting Assistant Surgeon D. S. Suiville was ordered to report in person to the medical director of the department for annulment of contract.

Omaha Barracks, Neb.—A General Court-martial was appointed to meet at Omaha Barracks, Nebraska, November 25. Detail for the court: Major James S. Brisbin, Second Cavalry; Captain Edwin W. H. Read, Eighth Infantry; Captain Edwin Pollock, Ninth Infantry; First Lieutenants Augustus W. Corliss, Egbert B. Savage, Eighth Infantry; Second Lieutenant John O'Connell, Eighth Infantry; Second Lieutenant William F. Norris, Ninth Infantry. First Lieutenant Cyrus A. Earnest, Eighth Infantry, judge-advocate.

Payment of Troops.—Major T. H. Stanton, paymaster, November 21 was ordered to proceed to pay the troops at Fort Laramie, W. T. Having performed this duty, he will return to his station in Omaha. The commanding officer of Fort D. A. Russell was directed to furnish an escort of four non-commissioned officers to accompany Major Stanton to Fort Laramie and return, by the stage coach, which is placed at his disposition for this trip.

Fort Fetterman, W. T.—A General Court-martial was appointed to meet at Fort Fetterman, W. T., December 4. Detail for the court: Captains David Krause, Fred-

erick E. Trotter, First Lieutenant Thomas F. Tobey, Second Lieutenants Frank Taylor, Robert A. Lovell, Richard T. Yeatman, George T. T. Patterson, all of Fourteenth Infantry. First Lieutenant Robert P. Warren, Fourteenth Infantry, judge-advocate.

Third Cavalry.—Leave of absence for thirty days, with permission to apply for an extension of thirty days, was granted Captain Anson Mills November 22.

Eighth Infantry.—Paragraph 4, S. O. No. 204, c. s., from department headquarters, is amended to read as follows, viz.: Leave of absence for thirty days, to take effect upon his return to his station from the duty upon which he is now engaged, with permission to apply for an extension of thirty days, is granted to Lieutenant-Colonel H. D. Wallen, Eighth Infantry.

Ninth Infantry.—Leave of absence for thirty days, with permission to apply for an extension of sixty days, was granted Captain T. B. Burrows, Ninth Infantry, November 26.

DEPARTMENT OF TEXAS.

Brigadier-General C. C. Augur: Headquarters San Antonio, Texas.

Fort Gibson, I. T.—The General Court-martial which convened at Fort Gibson, I. T., September 30, 1872, pursuant to paragraph 1, S. O. No. 169, headquarters Department of Texas, dated San Antonio, Texas, September 21, 1872, and of which Captain L. H. Carpenter, Tenth Cavalry, was president, and First Lieutenant A. S. B. Keyes, Tenth Cavalry, judge-advocate, dissolved November 16.

Twenty-fourth Infantry.—The commanding officer of the companies of Twenty-fourth Infantry in San Antonio, Texas, November 23 was directed to detail one sergeant and twelve privates from his command as escort for Lieutenant-Colonel W. R. Shaffer, Twenty-fourth Infantry, to Fort Duncan, Texas. The escort will then proceed to Ringgold Barracks, Texas, as escort to Major H. C. Merriam, Twenty-fourth Infantry, and will thence be sent to the station of their companies. Captain J. W. Clous, Twenty-fourth Infantry, November 23 was relieved from temporary duty in San Antonio, and ordered to join the companies of his regiment en route to Fort Brown, Texas.

Acting Assistant Surgeon T. B. Davis, U. S. Army, November 23 was ordered to report to Captain J. W. Clous, Twenty-fourth Infantry, for duty with the companies of the Twenty-fourth Infantry en route to Fort Brown, Texas. Upon his arrival at that post he will report to the commanding officer to accompany the companies of the Tenth Infantry to Fort McKavett, Texas.

The commanding officer of the companies of the Twenty-fourth Infantry, en route to Fort Brown, was directed to detail from his command one commissioned officer and ten enlisted men as escort for Colonel E. Schriver, Inspector-General U. S. Army, to Fort Brown, via Fort McIntosh and Ringgold Barracks. The officer detailed was ordered to report to the Inspector-General at department headquarters November 25.

Ninth Cavalry.—Leave of absence for thirty days, on surgeon's certificate of disability, was granted First Lieutenant E. D. Dimmick November 23.

Fort Davis, Texas.—The contract of Acting Assistant Surgeon T. Landers, U. S. Army, at Fort Davis, Texas, has been annulled at his own request, to date November 30, 1872.

First Lieutenant W. J. Kyle, Eleventh Infantry, and First Lieutenant Lewis Warrington, Fourth Cavalry, November 18 were detailed as additional members of the General Court-martial ordered in par. 1, S. O. No. 187, c. s., from department headquarters.

Fort Sill, I. T.—Acting Assistant Surgeon F. P. Cleary, U. S. Army, now at Fort Sill, Indian Territory, upon the return of the post surgeon, November 18 was ordered to Fort Gibson, I. T., reporting to the commanding officer, to relieve Acting Assistant Surgeon R. W. Dorsey, U. S. Army.

Fourth Cavalry.—Captain John Lee, Fourth Cavalry; First Lieutenant W. C. Beach, Eleventh Infantry; First Lieutenant H. Sweeney, Fourth Cavalry; and First Lieutenant C. L. Hudson, Fourth Cavalry, November 15 were detailed as additional members of the General Court-martial ordered in par. 4, S. O. No. 129, c. s., from department headquarters.

MILITARY DIVISION OF THE SOUTH.

Major-General J. McDowell: Headqrs., Louisville, Ky.

DEPARTMENT OF THE GULF.

Colonel W. H. Emory: Headquarters, New Orleans, La.

Fifth Cavalry.—First Lieutenant E. M. Hayes, A. D. C., November 25 was ordered to Covington, St. Tammany Parish, Louisiana, to carry out the special instructions of department headquarters. Upon the completion of which he will return to his proper station.

Payment of Troops.—Major William H. Johnston, paymaster U. S. Army, November 23 was ordered to Jackson Barracks and Baton Rouge, Louisiana, for the purpose of paying the troops at those stations on the rolls of October 31.

MILITARY DIVISION OF THE ATLANTIC.

Major-General W. S. Hancock: Headqrs., Philadelphia.

DEPARTMENT OF THE EAST.

Col.-Gen. W. S. Hancock: Headqrs. cor. Greene and Houston sts., N. Y.

Major-General McDowell is expected to leave New York on Monday next, December 8, for Louisville, Ky., where he is to establish his headquarters as commander of the Department of the South. He will be accompanied by the members of his personal staff, Brevet Captain John H. Coster, first lieutenant Eighth Cavalry, and Lieutenant James H. Jones, of the Fourth Cavalry. First Lieutenant Asa Bird Gardner, at the request of General McDowell, will also accompany him to Louisville, where he will continue his valuable services in the office of the judge-advocate Department

of the South. Lieutenant Gardner for over six years has been almost constantly employed on judge-advocate duties, and in cases in the civil courts for the Government. He has also successfully argued for the Government in the U. S. Supreme Court. We have already transferred the name of Major-General Hancock to the head of this department, as well as to that of the Military Division of the Atlantic, although the General will not arrive to take command until another week. It is understood that he will transfer the headquarters of the division from Philadelphia to New York, and establish himself here. General McDowell and the members of his staff were present on Wednesday evening last at the reception given by the Union League Club to Mr. Washburne, United States Minister to France, Brevet Major-General Wm. B. Hazen, colonel Sixth Infantry, Generals Horace Porter and J. H. Wilson being also present.

The following officers were registered at headquarters Department of the East for the week ending December 3: First Lieutenant John Leonard, U. S. Army; Surgeon W. Webster, U. S. Army; Assistant Surgeon Frank Reynolds, U. S. Army; Major Wm. D. Whipple, assistant adjutant-general; Captain Alexander Moore, Third Cavalry; Assistant Surgeon H. R. Tilton, U. S. Army; First Lieutenant Bernard Reilly, Fifth Cavalry; First Lieutenant G. B. Northup, Seventeenth Infantry; Assistant Surgeon Calvin De Witt, U. S. Army.

Second Artillery.—The General Court-martial which convened at Alcatraz Island, California, October 1, by virtue of S. O. No. 129, c. s., headquarters Department of California, and of which Captain James M. Robertson, Second Artillery, was president, and Second Lieutenant E. M. Cobb, Second Artillery, judge-advocate, dissolved Nov. 18. All the men remaining from batteries of the Second Artillery, which have left for the east, not including those undergoing sentence at Alcatraz Island, or retained in this department by orders from division headquarters, are attached to Battery B of that regiment for transportation to their respective commands, and will be sent to Alcatraz Island, California, without delay. The commanding officer of the Presidio November 16 was directed to detail a guard of two non-commissioned officers and eleven men to relieve all the men of Company G, Second Artillery, then at Yerba Buena Island; also to detail a commissioned officer and eighteen men to relieve the guard at Point San Jose, Cal. First Lieutenant Thomas D. Maurice, November 16 was directed to turn over the property now in his charge to his successor, and report with all the men of Company G, then under his command to the commanding officer of the Presidio. Lieutenant-Colonel William H. French, the headquarters, the non-commissioned staff and band, and Light Battery A, were ordered to Fort McHenry, Maryland, Department of the East, the station designated by the commanding officer of that department, agreeably to orders from headquarters of the Army, via Omaha, Nebraska, November 14. The ordnance and ordnance stores, and other Government property of the band and battery, except knapsacks, haversacks, and canteens, were ordered to be turned over to the band and Light Battery B, Fourth Artillery. First Lieutenant James H. Lord, regimental quartermaster, and the quartermaster-sergeant of the Second Artillery, were ordered to remain at the Presidio until all Government property for which Lieutenant Lord may be responsible is turned over to the regimental quartermaster of the Fourth Artillery. Assistant Surgeon Thomas McMillin, U. S. Army, was ordered to report to Lieutenant-Colonel French as medical officer, to accompany his command to Fort McHenry, Maryland. In addition to the duties prescribed for him in paragraph 1 of this order, Assistant Surgeon McMillin will take charge of the insane soldiers at the Presidio, and at Stockton, California, and conduct them to the Government Asylum at Washington City. On the completion of this duty Assistant Surgeon McMillin will return to his station in this military division.

First Lieutenant James E. Eastman, Company B, was temporarily attached to Company G, and ordered to proceed with it to Raleigh, North Carolina, where it was requested that he be relieved and ordered to Fort Foote, Maryland, in advance of the arrival of his battery, B, to take charge of the public property at that post. Acting Assistant Surgeon W. P. Welch, U. S. Army, November 18 was ordered to report to the commanding officer Battery G, Second Artillery, as medical officer, to accompany the battery to its destination, Raleigh, North Carolina. Upon the completion of this duty he will return to San Francisco, and report to the medical director Department of California.

Battery G, November 15 was ordered to assemble at the Presidio and proceed to the Department of the South to the station designated by the commanding officer of that department, agreeably to orders from headquarters of the Army, via Omaha, Nebraska, November 20. The ordnance and ordnance stores, and other Government property of this battery, except knapsacks, haversacks, and canteens, were ordered to be turned over to Battery M, Fourth Artillery. The arms and ordnance stores at present in possession of Battery M, were ordered to be turned in, to be sent to Benicia Arsenal.

Captain Carle A. Woodruff, Battery G, November 15 was ordered to remain at the Presidio until further orders.

Second Lieutenant Wm. Stanton, November 23 was ordered to join his company at Fort McHenry, Md.

All enlisted men of Battery D, at the Presidio, November 19 were ordered to be sent with Battery G, of this regiment as far as Raleigh, North Carolina, where they were to receive orders from the commanding general Department of the South.

Brevet Major John H. Calef, first lieutenant and adjutant of the Second Artillery, writes us from Fort McHenry, Md., November 25, 1872, that the headquarters, band and Light Battery A, under the command of Brevet Major-General Wm. H. French, lieutenant-colonel Second Artillery, arrived at this post on the 21st inst., having left San Francisco, Cal., on the morning of the 14th inst.

The troops came as far as Omaha by the regular train, and by special trains from Cincinnati to Baltimore, occupying only seven days and a half, notwithstanding frequent delays occasioned by the ordinary business operations of the different lines of the roads. Had these been suspended the trip could have been made in six days without increasing the present running rates. The connections were all made by judicious telegraphing in advance, aided by the efficient arrangements made by the officers of the different roads. Hot coffee was distributed twice a day to the men, and rations of fresh beef and bread as often as required. The men experienced very little inconvenience, such as a soldier could mention. The economy in time was wonderful. The following officers were with the command: Brevet Major-General Wm. H. French, lieutenant-colonel, Second Artillery, commanding; Assistant Surgeon Thomas McMillan, U. S. Army; First Lieutenant J. H. Calef, adjutant Second Artillery; Captain J. G. Ramsay, commanding Light Battery A; First Lieutenant A. C. Taylor, Light Battery A; Second Lieutenant M. Crawford, Light Battery A.

Fort Hamilton, N. Y. H.—A General Court-martial was appointed to meet at Fort Hamilton, N. Y. H., December 5. The following officers of the Third Artillery were detailed for the court: Captain Lorenzo Lorain, First Lieutenants J. R. Kelly, James Chester, C. M. Callahan, C. W. Harrold, Second Lieutenant C. W. Hobbs. First Lieutenant J. B. Eaton, judge-advocate.

Fort Adams, R. I.—A General Court-martial was appointed to meet at Fort Adams, R. I., December 3. The following officers of the Fifth Artillery were detailed for the court: Captains H. A. Du Pont, B. F. Rittenhouse, First Lieutenants W. E. Van Reed, C. C. McConnell, Charles Morris, E. R. Hills, adjutant. First Lieutenant W. B. Beck, R. Q. M., judge-advocate.

MILITARY DIVISION OF THE PACIFIC.

Major-Gen. J. M. Schofield: Hdqrs San Francisco, Cal. The following-named officers reported at these headquarters during the week ending November 26: Majors A. W. Evans, Third Cavalry; Wm. B. Royall, E. W. Crittenden, Fifth Cavalry; Captain E. D. Baker, assistant quartermaster; Assistant Surgeon H. J. Phillips, U. S. Army; Captains James Biddle, First Cavalry; E. C. Woodruff, Twelfth Infantry; First Lieutenants A. B. Bache, Bernard Reilly, Jr., Fifth Cavalry; Wm. Auman, Thirteenth Infantry; E. W. Stone, Twenty-first Infantry; Second Lieutenant Wm. Stanton, Second Artillery; Acting Assistant Surgeons Wm. H. Corbusier, H. W. Boone, U. S. Army.

DEPARTMENT OF CALIFORNIA.

The following-named officers reported at department headquarters during the week ending November 19: First Lieutenant John L. Johnston, regimental quartermaster, Twenty-first Infantry; Second Lieutenant Edgar S. Dudley, Second Artillery; Acting Assistant Surgeon H. H. Davis, U. S. Army.

Doctor Washington West, A. A. surgeon U. S. A., November 19 was ordered to report to the medical director Department of California, San Francisco, Cal., for annualment of contract.

Leave of absence for thirty days was granted First Lieutenant Edward R. Theller November 13 on surgeon's certificate of disability.

Assistant Surgeon D. L. Huntington, U. S. Army, who October 10 was assigned to duty at Camp Harney, Oregon, but, owing to the lateness of the season, November 15 was ordered to Fort Stevens, Oregon, for temporary duty, relieving Acting Assistant Surgeon J. O. Skinner, U. S. Army, who was ordered to Fort Cape Disappointment, relieving Acting Assistant Surgeon J. B. White, U. S. Army, who, upon being relieved was ordered to comply with S. O. No. 264, dated A. G. O., October 24, 1872.

Lieutenant-Colonel Rufus Saxton, deputy quartermaster-general, chief quartermaster of the department, November 19 was ordered to Fort Cape Disappointment to inspect the breakwater at that post, upon completion of which duty he will rejoin his station.

Surgeon R. H. Alexander, U. S. Army, November 14 was ordered to Fort Vancouver, relieving Surgeon J. H. Bill, U. S. Army, of his duties as post surgeon.

Acting Assistant Surgeon William E. Rust, November 14 was relieved from duty at Fort Klamath, Oregon, to enable him to comply with S. O. No. 264, dated A. G. O., October 24, 1872.

In addition to his present duties, Assistant Surgeon Edwin Bentley, U. S. Army, was directed November 20 to attend the sick at the Presidio of San Francisco during the temporary absence from that post of Assistant Surgeon Thomas McMillan, U. S. Army.

Twenty-first Infantry.—Company B, Twenty-first Infantry en route to the Department of the Columbia, Nov. 19 was ordered to Angel Island, California, to await transportation. The company was ordered by steamer of November 23 to Portland, Oregon, where it was to receive orders from the commanding general Department of the Columbia.

Twenty-third Infantry.—Dr. W. H. Corbusier, and Dr. G. A. Benjamin, A. A. surgeons U. S. Army, having reported at department headquarters, en route to the Department of Arizona, pursuant to paragraph 4, S. O. No. 264, W. D., A. G. O., c. s., November 25 were ordered to report for duty with the detachment of recruits for the Twenty-third Infantry, en route to the Department of Arizona, per steamer *Newbern* on the next trip of that steamer. They will continue with the recruits toward Prescott until met by orders from the commanding officer Department of Arizona.

Fourth Artillery.—Dr. P. H. Humphrey, A. A. surgeon U. S. Army, was directed to accompany Battery E, Fourth Artillery to Fort Stevens, and Company B, Twenty-first Infantry, to Portland, Oregon, by the steamer of November 23 as medical officer.

First Lieutenant Edward Field, and Second Lieutenant Matthew C. Grier, Fourth Artillery, November

25 were ordered to report to the commanding officer Angel Island, to conduct the recruits for the Twenty-third Infantry, per steamer *Newbern*, on the next trip of that steamer, to Fort Yuma, California. Upon the completion of which duty they will return to their proper station.

Battery E was ordered to Fort Stevens by the steamer of November 23. The battery will turn in its ordnance and ordnance stores to be sent to Benicia Arsenal, and will receive special arms at its station.

Battery F, November 15 was directed to take station at Alcatraz Island. The battery was ordered to turn in its present arms and ordnance stores, to be sent to Benicia Arsenal, and will receive at Alcatraz the special arms, etc., in use at that post. The men belonging to Battery A, at Angel Island, Cal., November 25 were ordered to be sent to report to the commanding officer of the Presidio, to join their battery on its arrival.

Provost Guard.—Hereafter, says Special Orders, it will be the duty of the officer commanding the Provost Guard to meet in person all bodies of troops under command of a commissioned officer arriving in this city and Oakland, and communicate to them such orders from department and division headquarters as may be necessary, and such information as they may require. For this purpose the chief quartermaster will keep him fully informed of the time of expected arrivals of troops and of the time of departure of the steamer to meet them when one is despatched. The commanding officer of the Provost Guard will also send a non-commissioned officer in season to meet all parties arriving under the command of a non-commissioned officer, especially those having in charge prisoners, to conduct the party to his office, or such other place as may be proper, and render any assistance that may be necessary.

Twelfth Infantry.—Leave of absence for thirty days was granted Captain J. E. Putnam November 20.

Fort Vancouver, W. T.—Surgeon R. H. Alexander, Medical Department, post surgeon Fort Vancouver, W. T., November 20 was ordered to relieve Surgeon Joseph H. Bill, Medical Department, as acting assistant medical purveyor, to enable Surgeon Bill to comply with paragraph 6, S. O. 281, Adjutant-General's office, November 7, 1872, relieving him from duty in this department.

Alcatraz Island, California.—A General Court-martial was appointed to meet at Alcatraz Island, California, November 25. Detail for the court: Lieutenant-Colonel W. L. Elliott, First Cavalry; Major H. R. Mizner, Twelfth Infantry; Captains James Biddle, First Cavalry; E. C. Woodruff, Twelfth Infantry; First Lieutenants Edward Field, Frederick Fuger, James B. Hazelton, Fourth Artillery; John M. Norvell, regimental adjutant, Twelfth Infantry. Second Lieutenant Peter Leary, Jr., Fourth Artillery, judge-advocate.

DEPARTMENT OF THE COLUMBIA.

Brigadier-General E. R. S. Canby: Headquarters, Portland, Oregon.

In General Orders No. 15 issued from headquarters Department of the Columbia, Portland, Oregon, October 26, the commanding general announces with deep sorrow, the death, on the 25th inst., of Major Simeon Francis, U. S. A., after a long life of usefulness, honored and respected in all the relations of official and private life. His remains were ordered to be taken to Fort Vancouver, there to be received and buried with appropriate military honors by the garrison of that post.

Leave of absence for thirty days November 13 was granted to Assistant Surgeon H. J. Phillips, U. S. Army, and on the recommendation of his medical attendant he is permitted to go beyond the limits of this department.

Second Artillery.—Major H. Clay Wood, assistant adjutant-general, November 13 was ordered to relieve First Lieutenant Louis V. Caziare, aide-de-camp, of his duties in charge of the Adjutant-General's Department.

Sitka, Alaska.—The General Court-martial which convened at Sitka, Alaska, pursuant to paragraph 2, Special Orders No. 104, of August 30, 1872, from department headquarters, and of which Major George P. Ihrie, Pay Department, was president, was dissolved November 4.

DEPARTMENT OF ARIZONA.

Lieutenant-Colonel George Crook: Headquarters, Prescott, A. T.

Fifth Cavalry.—Captain W. H. Brown, acting assistant inspector-general, November 5 was ordered to proceed to inspect the posts in this department via Camp Apache, A. T.

Major E. A. Carr, Major W. B. Royall, Major E. W. Crittenden, Fifth Cavalry, and Major A. W. Evans, Third Cavalry, November 8 were ordered to report to headquarters Military Division of the Pacific for court-martial duty.

Before a General Court-martial which convened at Fort Yuma, California, November 1, 1872, pursuant to S. O. No. 192, headquarters Military Division of the Pacific, and of which Major Charles J. Sprague, Pay Department was president, was arraigned and tried Second Lieutenant E. L. Keyes, Fifth Cavalry, upon the charge, "Conduct to the prejudice of good order and military discipline," the specification of which set forth that Second Lieutenant E. L. Keyes, while on duty with a detachment of enlisted men, in the service of the United States, did speak in an insulting and disrespectful manner to Second Lieutenant P. H. Hogan, Fifth Cavalry, saying "God damn you" or words to that effect. This is San Francisco, California, on or about October 18, 1872. The court after mature deliberation upon the evidence adduced, found the accused guilty of the charge and specification. And the court therefore sentenced him "To be reprimanded by the division commander, being thus lenient in view of the youth and inexperience of the accused." Major-General Schofield, in reviewing, and approving the proceedings of the court, says: "In view of the youth and inexperience of Lieutenant Keyes, and of the fact that he has given a written pledge to abstain for one year from the use of intoxicating or stimulating liquors, the abuse of which seems to have led him

to commit the offence of which he was convicted, the sentence is approved. Such language as that used by Lieutenant Keyes is entirely inadmissible between officers, and the habit of excessive indulgence in intoxicating liquors must of necessity prove fatal to any officer who continues it. It is hoped Lieutenant Keyes will appreciate these facts, and the further fact that inexperience cannot hereafter be considered any excuse for the commission of a similar offence. Lieutenant Keyes will be released from arrest and return to duty.

Major Wm. B. Royall, November 26 was ordered to Benicia Barracks, California, to inspect and report upon the cavalry horses at that post, for the Department of Arizona.

THE NAVY.

The Editor invites for this department of the JOURNAL all facts of interest to the Navy, especially such as relate to the movements of officers or vessels.

VARIOUS NAVAL ITEMS.

The Ossipee was put out of commission at New York on the 30th ult.

The St. Mary's sailed from San Francisco November 23, for Norfolk, Va.

The Wyoming arrived at the Naval anchorage, Norfolk, on the 27th November.

The Powhatan and *Saugus* left Philadelphia November 28, for Key West via Norfolk.

PAYMASTER George L. Mead, inspector of provisions, etc., at the Navy-yard, Mare Island, California, died on the 26th November, 1872.

The stores, etc., of the *Resaca*, were landed at Mare Island November 21, the crew discharged or transferred, and the vessel put out of commission.

ORDERS have been despatched to the European station for the return of the *Plymouth* to the United States, so that she will reach New York some time in May. She will take the southwest coast of Africa en route, and visit all the commercial ports as far south as the Bight of Benin.

ONE of the best authorities on coast defence is Colonel Von Scheliha, a Prussian and late of the Prussian General Staff, whose visit to this country a few years since will be remembered. Great attention has been given by him to the construction of torpedoes and to instruments of submarine warfare generally. He has recently been engaged in improving and perfecting his designs for an automatic torpedo, which, it is claimed, will surpass anything of the kind yet invented. He is now at St. Petersburg.

RECRUITING for the Marine Corps is being earnestly prosecuted at New York and Philadelphia, some sixty men having been enrolled at each place during twenty-five days of last month, and more than twice as many having been rejected. The recruiting done is very creditable, but is only just sufficient to balance the discharges, etc. An office at Boston, at this time, might possibly do as well as either Philadelphia or New York, or even better than they.

THE U. S. Hydrographic Office, under Commodore Wyman, continues making accessible to Americans and English the publications of other nations on the exploration of the Arctic Region. The large volume (discussed in the "Geographical Mittheilungen" of November 1872, p. 155), is being followed by supplements containing the later accounts. The second contains a minute chart of the European Arctic Ocean which combines in a very practical manner all explorations up to 1870. Deep-sea soundings, ice relations, currents, and magnetic observations.

THE *Broad Arrow* of November 16, says: Rear-Admiral Alden, commanding the United States squadron, gave an "at home" on Saturday afternoon, November 9, on board the flagship *Wabash*, at Gibraltar, for which a large number of invitations were issued. Among those present were H. E. the Governor (at whose request, in order not to disturb the guests, the usual salute on his reaching the ship was dispensed with); Major de Winton, R. A., A. D. C., and Mrs. de Winton; Lieutenant Lake, R. A., A. D. C.; Lieutenant-Colonel Smith, Grenadier Guards, Assistant Military Secretary; Major-General Bissell, C. B., and Miss Bissell; Captain Marillier, A. D. C., and Mrs. Marillier; Lieutenant-Colonel Bellairs, Assistant Adjutant-General, and Mrs. Bellairs; Captain Gilbard, Seventy-first Regiment, and Mrs. Gilbard; Deputy-Controller C. F. Potgieter, the Honorable the Chief Justice and the Misses Cochrane, etc. Boats were in attendance at the Ragged Staff to convey the visitors to the *Wabash*, and on board a *recherché* lunch was provided, to which ample justice was done. Dancing commenced to the music of the excellent band of the ship shortly after three o'clock, and was kept up till nearly gunfire, when everybody took their departure, highly gratified with the courtesy and hospitality displayed by Rear-Admiral Alden and the officers of the *Wabash*.

THE following is a report of Rear-Admiral B. F. Sands, superintendent of the U. S. Naval Observatory, of a fine display of meteors which occurred on the evening of November 27, and of observations made by Prof. Eastman and Harkness and Mr. Horrigan:

U. S. NAVAL OBSERVATORY,
WASHINGTON CITY, November 28, 1872.

Hon. Geo. M. Robson, Secretary of the Navy.

SIR: I have the honor to report that last night, being clear, a fine display of meteors was observed by Prof. Eastman and Mr. Horrigan, watchmen of the Observatory. In the early evening, Prof. Eastman being occupied in other duties, Mr. Horrigan observed 485 meteors between 6:15 and 8 P. M. From 8 to 9 P. M. Prof. Eastman observed part of the time, and 131 were seen. After 9 P. M. 100 more were seen, and at 10 P. M. the dis-

play seemed to cease. The maximum flight appears to have been between the hours of 6:15 A. M. and 6:30 P. M., reaching an hourly rate (102 in fifteen minutes) of 408. Mr. Horrigan saw 10 before he commenced the above record, making the whole number observed 729. They appeared to radiate, by Prof. Eastman's observations, from a space which might be enclosed by a circle 8° in diameter, having its centre at *Mu Andromedae*. Prof. Harkness also observed, but differs a little as to the point of radiance, placing it about half way between *Mu* and *Gamma Andromedae*. As there was but a single observer in the early evening, whose attention was confined to one portion of the heavens, there were probably four and a half times as many fell as were observed. According to Prof. Harkness's observations, the most of the meteors were about of the fourth magnitude; the color to the naked eye was generally faint blue, but some of the larger were reddish. The tracks were generally very short, not exceeding from 4° to 6°. The average time of flight was from one to two-tenths of a second. Prof. Eastman succeeded in catching the spectra of two small ones. The first had a faint continuous spectrum with an excess of yellow, or greenish yellow. The second had a faint green spectrum, the first glimpse of which appeared perfectly white. They were both very faint and moved rapidly. This display is a very remarkable one and exceeds that ordinarily seen on the 14th and 15th of November. The radiant point seems to indicate that they are moving in the orbit of Biela's comet.

Very respectfully, etc.,
B. F. SANDS,
Rear-Admiral, Superintendent.

THE U. S. steamer *Hartford*, from New York, en route to the Asiatic squadron, arrived at Gibraltar.

ON November 28, the U. S. steamers *Wachusett*, *Wabash*, and *Plymouth* arrived in the harbor of Villa Franca.

COMMODORE John Colhoun, on the retired list U. S. Navy, died on November 30 in the seventieth year of his age.

THE U. S. steamers *Guerriere* and *Albany* are to be offered for sale at the Brooklyn Navy-yard on Thursday, December 12, by the well-known auctioneer J. H. Draper.

THE uncertainty of the date of sailing of a man-of-war has been illustrated in the delay of the *Portsmouth* at this station. The time she would set sail has been several times stated, and the last date given was December 5, at 1 o'clock. The JOURNAL going to press on Thursday afternoon will not admit of our stating positively if such has been the case, though it is very probable she will have left New York on that date.

A STEAM launch, with a party of three Naval officers was left at Nicaragua the past summer to make a complete survey of Lake Nicaragua. It is supposed the work of the Nicaraguan expedition will be completed this coming winter. The expedition expected to sail about the first of December from Norfolk, Va., so as to take advantage of the dry season. The following is a complete list of the officers of the ship *Kansas*, and officers attached to the Expedition, the list furnished and published last week not being quite complete. The following are the officers of the Surveying Expedition: Commander Edward P. Lull, U. S. Navy; Lieutenant-Commander Gerhard C. Schultz, U. S. Navy; Lieutenant Wm. W. Rhoades, U. S. Navy; Eugene H. Leutze, U. S. Navy; Jacob W. Miller, U. S. Navy; Jefferson F. Moser, U. S. Navy; Master John M. Hawley, U. S. Navy; Ensigns Kossooth Nile, U. S. Navy; James H. Bull, U. S. Navy; Doctor J. F. Bransford, U. S. Navy; First Assistant Engineer George M. Greene, U. S. Navy; Civil Engineer A. G. Newell; Assistant Civil Engineer J. F. Crowell; Draughtsman A. Pohless; Aid Wm. V. W. Reilly; Commander's Clerk, A. L. McCrea, Jr. The officers attached to the U. S. steamer *Kansas* are Commander A. V. Reed, commanding; Lieutenant-Commander F. W. Dickens, executive officer; Lieutenant J. A. Chesley, navigator; Lieutenant, F. G. Hyde; Masters, E. S. Prime, J. B. Briggs; Midshipman, R. D. Stevens, Past Assistant Surgeon, H. N. Beaumont; Past Assistant Paymaster G. F. Bemis; First Assistant Engineer J. P. Kelly; Second Assistant Engineer, J. Godfrey; Captain's Clerk, F. A. Benson; Pay Clerk, J. S. Rider.

NAVY DEPARTMENT,
WASHINGTON, Nov. 29, 1872.

U. S. Navy Regulation Circular No. 3.

Paragraph 1,412, Regulations for the Navy 1870, is amended by omitting after "Paymaster," the words, "or any other officer responsible for stores." "Continued boards of survey" are to be confined to the examination of paymasters' stores. Paragraph 1,413 is amended to conform to 1,412.

GEO. M. ROBESON, Secretary of the Navy.

NAVY GAZETTE.

REGULAR NAVAL SERVICE.

ORDERED.

NOVEMBER 26.—Lieutenant-Commander G. F. Schulze, Lieutenants E. H. C. Leuze, J. F. Moser, and W. W. Rhoades, to take passage in the Pacific mail steamer of the 30th inst. for Aspinwall, thence to San Juan del Norte, and on arrival to report to Commander Lull for duty in the Nicaraguan Surveying Expedition.

Assistant Surgeon Edward Evans, to the Naval Hospital New York.

NOVEMBER 27.—Lieutenant E. W. Bridge, to the Frolic.

NOVEMBER 29.—Lieutenant-Commander John Schouler, to the Hydrographic Office, Washington, on the 14th of December.

Lieutenant-Commander John R. Bartlett, to ordnance duty at the Navy-yard, Boston.

NOVEMBER 30.—Lieutenants A. A. Boyd and Geo. A. Baldy, to the Michigan.

Gunner Thomas Stewart, to temporary duty at Fort Madison, near Annapolis, Md.

Chief Engineer B. B. H. Wharton, as a member of the Board of Examiners at Philadelphia on the completion of his present duties Annapolis.

DECEMBER 2.—Paymaster James F. Hamilton, to the Navy-yard, Mare Island, Cal.

DECEMBER 3.—Lieutenant George E. Ide, to the receiving ship Vermont, at New York.

DETACHED.

NOVEMBER 26.—Commander K. R. Breese, from the command of the Plymouth on the 21st ult., and placed on waiting orders.

Past Assistant Surgeon B. S. Mackie, from the Naval Hospital, New York, and ordered to the Naval Laboratory, New York. Assistant Surgeon B. F. Rogers, from the Navy-yard, Washington, and ordered to the Tallapoosa. Assistant Surgeon P. B. Bellby, from the Tallapoosa, and ordered to the Navy-yard, Washington.

NOVEMBER 27.—Lieutenant George W. Coster, from the California, and ordered to return home and wait orders.

Ensign Boynton Leach, from the Naval Academy, and ordered to the Frolic.

Midshipmen H. C. Nye, M. C. Dimock, and C. S. Richman, from the Naval Academy, and ordered to the Richmond.

NOVEMBER 29.—Midshipmen C. F. Emmerick, A. B. Mulliman, and F. H. Geutah, from the Naval Academy, and ordered to the Richmond.

First Assistant Engineer George M. Green, from the Navy-yard, Washington, and ordered to duty in the Nicaraguan Surveying Expedition.

First Assistant Engineer A. J. Kenyon, from duty on the South Atlantic Station, and placed on waiting orders.

NOVEMBER 30.—Chief Engineer H. Newell from duty as member of the Board of Examiners at Philadelphia, on the reporting of his relief to Chief Engineer Wharton, and ordered to duty at the Navy-yard, Philadelphia.

DECEMBER 2.—Ensign John B. Milton, from the Naval Academy, and ordered to temporary duty on board the Richmond, and upon falling in with the Worcester to report for duty on board that vessel.

Acting Assistant Surgeon J. W. Elston, from duty at the Marine Hospital at Baltimore, and placed on waiting orders.

DECEMBER 3.—Commander D. L. Braine, as member of the Board of Inspection, and placed on waiting order.

Lieutenant-Commander B. P. Lambert, from the California, and ordered to proceed home and wait orders.

Lieutenant-Commander Yates Starling, from the receiving ship Independence, at the Navy-yard, Mare Island, California, and ordered to the California.

Midshipman F. L. Ludlow, from the Naval Academy, and ordered to the Richmond.

PROMOTED.

NOVEMBER 26.—George F. Emmons, to be a rear-admiral in the Navy, from November 25, 1872, vice Rear-Admiral J. F. Green, retired.

Foxhall A. Parker, to a commodore in the Navy, from November 24, 1872.

John Guest, to a commodore in the Navy, from November 25, 1872.

J. C. P. DeKrafft, to a captain in the Navy, from November 20, 1872.

Alfred T. Mahan, to a commander in the Navy, from November 20, 1872.

George C. Remey, to a commander in the Navy, from November 25, 1872.

Charles Eversfield, to a medical director in the Navy, from June 29, 1872.

Robert T. Macoun, to a medical director in the Navy, from November 7, 1872.

Wm. T. Hord, to a medical inspector in the Navy, from July 6, 1872.

Albert L. Gihon, to a medical inspector in the Navy, from November 7, 1872.

Charles J. S. Wells, to a surgeon in the Navy, from July 6, 1872.

Edward Kershner, to a surgeon in the Navy, from November 7, 1872.

RETIRED.

Rear-Admiral Joseph F. Green, placed on the retired list from November 24, 1872.

RESIGNED.

NOVEMBER 26.—Midshipman C. A. P. Kunhardt, to take effect March 22, 1873.

Cadet Midshipman W. C. Oliver, from November 26, 1872.

SUSPENSION.

NOVEMBER 26.—The residue of the term of suspension of Captain Thos. H. Stevens remitted, and ordered to regard himself waiting orders.

LIST OF DEATHS

In the Navy of the United States which have been reported to the Surgeon-General of the U. S. Navy and chief of the Bureau of Medicine and Surgery for the week ending November 30, 1872:

Patrick Bropley, landsman, September 9, U. S. steamer Pensacola, at Payta, Peru.

CHANGES IN THE MARINE CORPS.

The following are the changes in the officers of the Marine Corps since last memoranda, viz.:

NOVEMBER 30.—Second Lieutenant Julius C. Shaller, ordered to report for duty at Marine Barracks, Boston, Mass., upon being detached from steamer *Osceola*.

DECEMBER 2.—Second Lieutenant Albert H. O'Brien, by direction of Navy Department, ordered to report for duty at Marine Barracks, Washington, D. C.

First Lieutenant Henry C. Cochrane, by direction of Navy Department, ordered to report for duty at Marine Barracks, Philadelphia, Pa.

First Lieutenant Charles F. Williams, granted leave of absence for thirty days, at expiration of which to report for duty at Marine Barracks, Washington, D. C.

By a general order just issued from the headquarters of the Army, the following is the detail for recruiting service from January 1, 1873, to October 1, 1874:

Colonel J. S. Gregg, Eighth Cavalry, will relieve Colonel Edward Hatch, Ninth Cavalry, as Superintendent of the Mounted Recruiting Service Station at the depot at St. Louis; Colonel John Gibbons, Seventh Infantry, will relieve Colonel J. C. Davis, Twenty-third Infantry, as Superintendent of the General Recruiting Service Station at New York; Major J. P. Roy, Sixth Infantry, will relieve Major M. M. Blunt, Fourteenth Infantry, in command at the depot at Governor's Island, New York Harbor; Major J. N. G. Whistler, Twenty-second Infantry, will report for duty at the sub-depot at Newport Barracks, Kentucky. Regimental officers will be selected by their Colonels, according to the usual rules, and ordered to report in person on the former date to the Superintendents for their respective arms. Details will be made from cavalry regiments, to report to the Superintendent of the Cavalry Service at the St. Louis depot; and details from infantry regiments to report to the Superintendent at New York. Officers of the colored cavalry regiments will recruit especially for these regiments under the existing arrangements, and all officers on general and mounted recruiting service will continue to enlist men for colored regiments as at present. Recruiting officers are expected to give their personal attention to their duties, and to adhere to the regulation governing them. The prohibition against the enlistment of minors and men of doubtful morals will be strictly enforced by the Superintendents in accepting recruits at the rendezvous. Tripler's Manual affords the required standard of qualifications, and it is in like manner the standard for instruction after the recruits arrive at the depot. Recruiting for the Engineer Battalion will be continued under the instruction contained in the letter from this office dated October 6, 1871, subject to such changes in the detail of officers of the corps as the Chief of Engineers may deem expedient.

U. S. ARMY AND NAVY JOURNAL.

NEW YORK, SATURDAY, DECEMBER 7, 1872.

Office, No. 39 Park Row, New York.

SUBSCRIPTION, SIX DOLLARS A YEAR.

THE CHARACTER OF OUR ARMY.

GENERAL SHERMAN'S TESTIMONY.

WE have pleasure in giving the leading place in the JOURNAL to the subjoined letter from the General of the Army. It is a defence of the junior officers of the service which is as just as it is generous, and we hope and feel sure it will command the attention and convince the judgment of many uninformed laymen, whose ideas of Army life and the standards of acquirement and character among our officers need just such enlightenment as General SHERMAN gives in the letter here appended:

To the Editor of the Army and Navy Journal.

SIR: One of my officers has called my attention to a letter in the JOURNAL of November 30, entitled "The Army Intellectual Inactivity," calculated to do no good but much harm. If your correspondent "B" had signed his full name, the world at large could have formed some judgment on the subject by guessing at his means of observation, but the whole temper of the article evinces such a want of knowledge that I infer he has had little intercourse with the two thousand and more officers that now compose our Regular Army. He cannot deny that at home and abroad I have had opportunities of comparing our own officers with those of the Great Powers, Russia, Prussia, Austria, Italy, France, Spain and England, and I assert that since the reorganization of our Army at the close of the civil war, I have personally mingled with our officers of every grade from highest to lowest, and I have no hesitation in saying that for professional and general intelligence, for sobriety, for the courtesies and amenities of life, and those accomplishments which make the officer a welcome guest in the most refined circles throughout America, our Army officers compare generally well with the same grades elsewhere.

I do not write this for you or your correspondent "B," but for the friends and families of the younger officers generally, who will be shocked to learn that their children are subject to gross examples and contaminating influences. Take our Army register and read the familiar names down to the list of captains, and you will recognize those who in Mexico and in our civil war commanded successfully armies, corps, divisions, and brigades, whose reports evince a clearness of expression, a precision of language, and correctness of the rules of grammar that will compare favorably with like documents of any branch of our Government. Since the close of our civil war, duties of the most delicate kind have devolved on the military authorities at the South, that called for the highest order of knowledge of the constitution and laws of the country, and I have heard more than one member of the Supreme Court bear testimony to this fact, and to the principles of high honor and integrity that made their conduct conspicuous.

To question the honor, integrity and intelligence of our higher officers is to cast a stain upon our national history, which they have had a full share in making and writing. It is of the junior officers that I wish to treat, because they are scattered to the four winds, in little detachments far away from civilization, and cannot appeal to the bar of public opinion save by their official conduct and through their friends. Of these I am the chief; and from daily, weekly, and monthly reports from themselves and from their lawful superiors, I have a mass of testimony far better than your correspondent can possibly have. I am perfectly satisfied with them, and hereby encourage them in the faithful discharge of the duties to which they are appointed, with the full belief that they possess as many advantages for mental and physical education as had Meade and Thomas, McPherson and Mower, Grant and Sheridan, in their day of probation, and that with patience and time they may attain the same reward and fame. At all of our military posts the officers and men have schools and libraries as good as their limited pay and means afford, and though the necessities of our country demand that the great bulk of the Army shall be kept in the wild and uninhabited parts of our vast country, as it were outlying pickets in the progress of settlement, still to each officer in turn will be afforded a chance to see occasionally his own home and family, and to mingle with the most refined classes. Of course there are those who are exceptions to the general rule as to character, but courts-martial and the stern rules of war will surely eliminate them as it has in the past, for more than "sixty young officers" have been dismissed whose war record was as

good as that of the sixty Prussians referred to by your correspondent, and for like causes.

The Army is not responsible for the new appointees, whether from West Point or from civil life. We take them as they come and find no fault, but let them fall quickly into the ranks and work out their own destiny. West Point is as independent of the Army as Yale or Princeton. Each Congressman appoints his cadet for reasons best known to himself. For the four or five years he is at the Academy, he is under Congressional government and inspection. The Secretary of War has immediate control, under the laws of Congress, so that the Army is no more responsible for the kind and quality of education imparted, than if West Point was a college of surgeons. To be sure, the officers and professors at West Point are military men, though some of them have never served directly with soldiers or taken part in battle. Still, they are military men, and impart the knowledge presumed by past experience to make good soldiers, and it may be they impart what are known as "the prejudices of caste." But that the Army takes and receives a graduate of West Point as a finished soldier is a mistake at which every veteran smiles. The vanity of youth is not limited to that spot, but is found everywhere—at Heidelberg, at Saint Cyr and Sandhurst, and at Yale and Princeton. No sooner has the graduate reached his company than he finds he has some things to unlearn and thousands of things to learn; and that many have learned them and learned them well, is familiar to the readers of American history. The criticism made by the last Board of Visitors is severe, and it may be just, but it is criticism on themselves not on the Army. Congress makes all laws for the Military Academy; its members appoint the cadets by name from their own constituents, supervise their education by annual visits and reports, and if they send into the Army officers improperly educated, it is their business, not ours. Some of the graduates may make mistakes in grammar, and even be a little backward in the classics, but on the whole they are usually a fine set of manly fellows, and the only fault I find is that there are too few of them for the usual vacancies. If a little vain of their newly-fledged office and their own superior knowledge, it soon vanishes, and usually they settle down to their work like well-trained racers. It is an awful mistake if they think their education is complete when they are commissioned. Every minute and hour of the day they are told quite the contrary, and all the schooling in the world would not be more efficacious than what their own eyes and ears teach them on first reaching their post of duty.

A lawyer should be a good lawyer first and a gentleman afterwards; a surgeon should theoretically and practically know his profession, and if favored by a refined nature and education so much the better. The same is true of the engineer, the architect, the minister, and merchant, indeed of all professions and trades, and of the officer of the Army. We expect every officer to know theoretically and practically his profession; first, the duties pertaining to his immediate office and the one to which he expects to be promoted; next the Constitution, history, and practice of his own Government, and if possible, the peculiar features of all other governments, and then whatever knowledge is within reach, with the absolute certainty that he may suddenly be called on to use it; and last, even the "classics," for which our civic scholars contend so persistently—not that they are at all essential to our profession, but because they give us the assurance that noble and virtuous deeds survive all time, whereas ignorance, presumption, and vanity perish and are forgotten.

In Europe officers possess many and great advantages over ours. Their armies are kept in large masses, generally by brigades, and never less than a single battalion; are near cities, having libraries and all the facilities for study and society, and where the higher officers can better supervise the instruction and conduct of the younger men. Whereas, our Army is necessarily divided up into small detachments of one or two companies at a post. These also are being constantly changed, and each officer is necessarily limited in the amount of his baggage, so that no one can well afford a library of his own. Yet at most of the posts which I have visited in Texas, the Indian Territory, New Mexico, California, Oregon, Idaho, etc., I have always been most agreeably surprised at the size of the post library, and the good judgment displayed in the selection of books and magazines. Those are not supplied by Government, but are purchased by the voluntary subscriptions of officers and men. Again, the people of the United States rarely give credit to the amount of labor imposed on our small Army. The marches performed, the reconnoisances of new territory, building new posts, combats with the Indians, etc., indicate a chronic state of war, and I believe they perform ten times as much hard work per annum as any equal number of men in

any European army in time of peace. This state of facts, however unpleasant, constitutes the very best possible school of practice; and should unfortunately war again occur again in our day, I feel confident that among the junior officers of the Army we can find the necessary general, field, and staff officers for a hundred thousand men.

I am truly, etc.,
W. T. SHERMAN, General.

BREVET Brigadier-General HORACE PORTER has resigned his position as Secretary of the President and his commission in the Army, to accept the office of Vice-President of the Pullman Palace Car Company. In parting with General PORTER the President expressed his sense of the loss he sustained in being deprived of so valuable an adjutant, but recognized the fact that in his new position General PORTER would obtain more adequate reward for his services than our economical Government allows its officials. Mr. PULLMAN has evidently a proper appreciation of the value of Army training, for he has surrounded himself in the management of his company with several well-known and experienced Army officers besides General PORTER, who will, Mr. PULLMAN himself intending to visit Europe, have control of the affairs of the organization. Colonel D. N. WELCH (late of the Quartermaster's Department), is the present efficient General Superintendent. General T. F. RODENBOUGH (now on the retired list of the Army), is the General Western Agent, and Colonel H. B. REED, late of the Artillery, is the General Inspector of the company.

General PORTER has already arrived in New York, which will be his headquarters in future, and where he is sure of a most cordial welcome. He has for the last four years performed an amount of most necessary but exceedingly irksome and thankless service, which few understand, and from which we can well imagine he is heartily glad to be relieved, much as he regrets the severance of the intimate personal and official relations he has so long sustained to General GRANT.

OUR space this week is largely occupied by the reports of the Secretaries of the Army and Navy, and we are therefore unable to publish the message of the President. That document is characterized by the method and precision which distinguish military reports, the author contenting himself with stating facts and avoiding arguments. The message seems to us—and this we regard as highest praise—a soldierly paper. What concerns the readers of this journal most nearly is the President's general endorsement of the recommendations of the Secretary of War and the Secretary of the Navy. We trust that Congress will attentively regard these words of advice, though perhaps we may, in some particulars, find it necessary to take issue with the two secretaries, at the same time that we, as a whole, give assent to their propositions. The crowded columns of this number of the JOURNAL manifestly prevent such comment whether general or particular. The fact that the most striking portion of the message is devoted to the discussion of means of improving the communication between the inland waters and the Atlantic coast will especially commend the paper to the attention of engineer officers, who will, if General GRANT's views are carried out, have charge of the execution of the great internal improvements recommended.

SECRETARY ROBESON's recommendation in regard to the building of additional war vessels has received prompt consideration in Congress. In the House, on the 3d inst., Mr. Schofield, of Pennsylvania, from the Naval Committee, reported a bill to authorize the construction of ten steam vessels of war, and appropriating \$3,000,000 for that purpose. The vessels are to carry each ten or more guns of large calibre, and the hulls are to be either of iron or wood, as the Secretary of the Navy may determine. Mr. Hale offered an amendment that not less than five of the ten vessels shall be constructed in private yards in the United States under contract. Mr. Randall advocated the amendment, but he thought the bill was too loosely drawn and left too much discretion to the Secretary of the Navy. Mr. Schofield replied to Mr. Randall's strictures, arguing that the more restrictions placed on the Secretary the less security there would be to have the work properly done. Mr. Archer thought that so far as the personnel of the Navy was concerned, the country had a right to

be proud of it, but that as to the vessels of the Navy, the country should be ashamed of them. He opposed Mr. Hale's amendment, arguing that the Navy-yards were in good condition to do the work, and that experience had shown that vessels of war built in private yards under contract were generally failures. Mr. Potter asked to what use these vessels were to be applied. Mr. Schofield responded that there were now kept up five squadrons—the North Atlantic, the South Atlantic, the Mediterranean, the Pacific, and the East Indian—and that there were not now in the Navy enough sailing vessels to keep these small squadrons full. Small vessels, he said, were really better for such service than large ones, for the small ones could enter all the ports, and were much less expensive. If these squadrons were to be withdrawn or reduced, then these vessels were not wanted, but otherwise they were much needed. Mr. Cox suggested a reduction of the number of vessels from ten to five, and the making of a provision for obtaining live-oak timber, out of which a durable Navy might be built up that would reflect honor on the service and credit on the country. Mr. Banks said that he had introduced this bill last session in anticipation of trouble with Spain, and the affairs in the Gulf of Mexico had not improved since then. No one knew what might occur there any day, and it was proper to be prepared for all contingencies. He would like to wait until Navy-yards could be built and live oak grown, but it was proper to be prepared for emergencies. Navy-yards and live-oak would come afterward for the reconstruction of the Navy on a grand scale. Mr. Potter of New York inquired as to the proposed size of these vessels. Mr. Schofield considered that four hundred or five hundred tons would be large enough. He did not suppose that any of them would exceed one thousand tons. Mr. Banks added that he supposed four or five guns would be armament enough for each vessel.

THE subject of cable communication, both between England and Bermuda, and the United States and Bermuda, is now receiving attention. A company has been organized in England for the purpose of laying wires from that point to Bermuda, and the Government has designated H. M. S. *Challenge* to take soundings for the purpose. An American Company has also been organized to lay wires between New York and Bermuda, and application has been made for the services of one of our Naval vessels to take the necessary soundings. No vessel has yet been detailed for the purpose, but the request has been granted so far as to indicate to the company that the Navy Department will aid in the enterprise by having a line of soundings made as early as convenient. The distance between New York and Bermuda is about 540 miles, and it is estimated that the cable can be laid in 1873.

THE Hon. E. B. Washburne, our minister to France, was on Wednesday evening the recipient of the hospitalities of the Union League Club of New York, and was welcomed by a large assemblage of the members of the club, and a great number of distinguished guests, including many Army and Navy officers, who lent their aid to the occasion. Among those present were the following gentlemen: Major-General Irvin McDowell and staff, U. S. Army; Major-General Q. A. Gillmore and General Barnard, U. S. Army; General Shaler and staff, and Colonel Spencer, First Division, N. G. S. N. Y.; Colonel Stebbins, Vice-Admiral S. C. Rowan, U. S. Navy; Major-General Woodward and staff (in citizens' dress) Second Division, N. G. S. N. Y., and many others.

A DESPATCH from San Francisco December 2 announces that the Modoc Indians have attacked the Tule Lake settlement and killed three men. The women escaped to the adjoining settlement, being obliged to walk the entire distance—nine miles. The Governor has been called on for State aid, the settlers being short of arms and ammunition. A later despatch announces that all the settlers on Link river have been massacred, and that eighty warriors are in the field with only thirty-five soldiers from Fort Klamath to fight them. Companies are organizing in the northern part of the State to take the field. Fifty Klamath Indians, well armed, and under command of Captain Terra, are on the war path. Fourteen whites, also well armed, and under the command of Captain Kelly, have joined in the pursuit.

THE following is the text of a resolution offered by Mr. Sumner in the Senate, on which we will comment another time:

Whereas, The national unity and good will among fellow-citizens can be assured only through oblivion of past differences, and it is contrary to the usage of civilized nations to perpetuate the memory of civil war,

Therefore, be it enacted, etc., That the names of battles with fellow-citizens shall not be continued in the Army Register or placed on the regimental colors of the United States.

WE are pleased to record the fact that Mr. Cameron, of Pennsylvania, has introduced into the Senate a bill granting a pension of \$2,000 a year to the widow of the late Major-General Meade. The sum is paltry compared with the pensions awarded by the great European powers to the widows of officers of like rank and equally distinguished service; but we shall not cavil at that; it is a proper recognition of the debt of the nation to one of its most illustrious defenders.

REPORT OF THE SECRETARY OF THE NAVY.

NAVY DEPARTMENT, WASHINGTON, Nov. 26, 1872.

SIR: I respectfully submit the following report of the Navy Department and of the naval service for the past year.

The Navy of the United States numbers 178 vessels, carrying 1,378 guns exclusive of howitzers:

66 steamers, 929 guns.
31 sailing-vessels of all classes, 323 guns.
51 iron-clads, 127 guns.
28 tugs.

Of the steamers, 5 are unfinished on the stocks, 2 are in use by the Quarantine authorities of New York, 9 are undergoing repairs, 37 are in commission for squadron and special service, and 15 are in ordinary.

Of the sailing-vessels, 2 are on the stocks, 6 are in commission as cruisers and store-ships, 6 are in commission as receiving-ships, 8 are used for quarters and other special purposes at the navy-yards, the Naval Academy, and other stations, 2 are undergoing repairs, and 8 are in ordinary.

Of the iron-clad vessels, 2 are in commission on the North Atlantic station, 1 is in use at the Naval Academy, and the remainder are undergoing repair or are laid up at League Island and New Orleans.

Of the tugs, 1 is in the service of the expedition toward the North Pole, another on the Asiatic station, and the remainder, with the exception of a few undergoing repairs, are in use at the yards and stations.

Fourteen vessels have been commissioned during the year, 10 have been put out of commission during the same period, and 4 are returning from foreign stations, their term of service having expired.

There are 45 vessels in commission for sea-service (including 3 used as store-ships), carrying 462 guns.

These vessels are distributed as follows:

NORTH ATLANTIC STATION.

	Guns.
Worcester	15
Canandaigua	10
Wyoming	6
Shawmut	3
Nipsic	3
Terror	4
Saugus	2
Pawnee (store-ship)	3
Kansas	3
Powhatan	17
Richmond	14
Eleven vessels	77

SOUTH ATLANTIC STATION.

	Guns.
Lancaster	22
Ticonderoga	11
Wasp	—

Three vessels

EUROPEAN STATION.

	Guns.
Wabash	45
Brooklyn	20
Congress	16
Shenandoah	11
Plymouth	12
Wachusett	6
Six vessels	110

ASIATIC STATION.

	Guns.
Colorado	45
Hartford	18
Lackawanna	10
Alaska	12
Ashuelot	6
Monocacy	6
Iroquois	6
Yantic	3
Saco	3
Palos	1
Idaho	7
Eleven vessels	116

NORTH PACIFIC STATION.

	Guns.
California	21
Benicia	12
Saranac	11
Narragansett	5
Saint Mary's	16
Five vessels	65

SOUTH PACIFIC STATION.

	Guns.
Pensacola	22
Omaha	12
Tuscarora	6
Ossipee	8
Onward (store-ship)	3
Five vessels	51

	Guns.
Frolic	45
Michigan	12
Constellation	10
Four vessels	81

The following, named in the above, are returning to the Atlantic States:

	Guns.
Colorado	45
Ossipee	8
Alaska	12
Saint Mary's	16
Four vessels	81

which, when put out of commission, will reduce the force, unless others are fitted out, to 41 vessels, carrying 381 guns.

This shows an active force slightly increased in strength since the date of the last report, with improved efficiency on account of its better distribution in a greater number of smaller and more active vessels. The limit of our power is, however, almost reached in this direction, since we have no more small cruisers which can be put in commission without repairs of an extent and at an expense wholly inadequate to the results to be obtained. Of the ships built during the war, including those which, commenced then, have been finished since its close, many were designed for special service, and are not of a character adapted to our present needs; most are too large for the economical and efficient distribution of our small peace force, and almost all, built hastily of unseasoned timber, have now fulfilled the measure of their useful life.

To spend money in the constant endeavor to keep these ships afloat is the most expensive way of maintaining a navy, since constantly increasing expenditure is answered by constantly decreasing results of good. It would be the wisest economy at once to afford the means and the authority to build a number of small, active cruisers, of live oak or of iron, which, adapted to the duties and the means of our Navy in time of peace, and fitted with the more modern and economical machinery which has succeeded that in use at the commencement of the decade, could be maintained and employed with more effect, and, for some years, with comparatively little expense for repairs.

This subject has been constantly pressed upon the attention of Congress, and I again repeat it, because I am constantly warned, as ship after ship is withdrawn from active service and laid up without hope of usefulness in the future, that the limit of our old resources is being rapidly reached, and that without new material our active force on the several stations must rapidly decrease, until our cruising navy will in a few years pass almost entirely away.

IRON-CLAD FORCE.

Early in the past year the attention of the Department was arrested by the fact that many of our iron-clad fleet needed extensive repairs to make them fit for efficient service. Several of them, and these the most powerful, are built of wood, while the beams and much of the frames of those whose hulls are of iron, are of the same material. This wood-work was found, on inspection, to have decayed so much that there seemed to be no way left but to replace it with iron, and it was necessary to do so immediately unless we were willing to be left entirely without effective iron-clad force to meet any duty which might arise. This was at once done, and we have now the satisfaction of knowing that several of our monitors are in complete repair, and more effective than ever for any appropriate service. This emergency has not, however, been met without considerable expense, and it has caused a heavy draft upon the appropriations to the Bureaus of Construction and Steam-Engineering, which should be reimbursed to them if the efficiency of our cruising navy is to be maintained.

In addition to its ordinary duties, the Navy has continued during the past year to supply officers for lighthouse duty, and the men and officers for the coast survey, and has been engaged in completing the surveys of the Isthmus, and in making hydrographic surveys and soundings in both oceans wherever the safety or interests of our people seem to demand it.

The various cruising stations, with the duties respectively assigned to each, remain unchanged since the date of the last report, except in the case of the Pacific Station, which was on the 1st day of October last divided as hereinafter mentioned.

EUROPEAN STATION.

Rear-Admiral James Alden, in his flag-ship, Wabash, arrived at Ville Franche December 30 last, and on the 1st of January following relieved Rear-Admiral Charles S. Boggs of the command of the naval force on the European station, the latter returning home.

The vessels now on this station are the Wabash, 45 guns (flag-ship); the Brooklyn, 20 guns; the Congress, 16 guns; the Plymouth, 13 guns; the Shenandoah, 11 guns; the Wachusett, 6 guns; in all, 6 vessels and 110 guns.

The Guerriere and Junius have returned from this station, and have been put out of commission; the former at New York in March, and the latter at Boston in July. The force has been increased by the addition of the Congress in April.

During the months of January, February, March, and April, the vessels of this station, with an occasional exception, were kept together, and visited the principal ports of France and Portugal, some of the ports of Germany, and the waters of England. They have recently returned to the Mediterranean, and will be spread over the station, and will visit the ports and countries of the East, and the north and west coasts of Africa.

A most gratifying exchange of courtesies has taken place between the fleet and the authorities of the countries visited, and our officers and men have been received with every evidence of kindly feeling for the Government and the people of the United States.

The movements in detail, of the vessels on this station, as well as of those on the other stations and on special service, will be found in the appendix to this report.

ASIATIC STATION.

The vessels now attached to this station are the Colorado, 45 guns; Hartford, 18 guns; Lackawanna, 10 guns; Monocacy, 6 guns; Alaska, 12 guns; Ashuelot, 6 guns; Iroquois, 6 guns; Saco, 3 guns; Yantic, 3 guns; the storeship Idaho, 7 guns, and the small steamer Palos; in all, 11 ships, with 116 guns. Orders have been recently sent detaching the Alaska and the Colorado from this station, and they will soon both be en route for the United States.

Rear-Admiral Thornton A. Jenkins commands the

force on this station, having succeeded Rear-Admiral John Rodgers, at Yokohama, May 15, 1872.

The flag has been shown at such ports and places in India, China and Japan as our commercial interests, the encouragement and protection of our citizens, and the cultivation of friendly relations with the authorities and people of those countries dictated. A resort to force has, on no occasion, been necessary to advance or secure either of these objects.

The Lackawanna, from the Pacific coast, and the Iroquois, from the Atlantic, joined the force of this station in August, and the Hartford and the Yantic are now on the passage out. The latter vessel will visit Zanzibar to co-operate in all proper measures to induce the Imam of Muscat to discontinue the transportation of slaves within his dominions.

The Iroquois and Yantic availed themselves of the shorter and quicker passage via the Suez Canal, and the Hartford will do the same.

NORTH ATLANTIC STATION.

Rear-Admiral S. P. Lee, who was in command of this station at the date of the last annual report, hauled down his flag, at Hampton Roads, August 12, and was succeeded by Rear-Admiral Joseph F. Green, who is at present in command, and who hoisted his flag on the Worcester, at Boston August 20.

The Worcester, 15 guns; Powhatan, 17 guns; Richmond, 14 guns; Canandaigua, 10 guns; Wyoming, 6 guns; Shawmut, 3 guns; Nipsic, 3 guns; Kansas, 3 guns; the monitor Terror, 4 guns; the monitor Saugus, 2 guns, and the hospital ship Pawnee, constitute the force on this station—a total of 11 vessels, with 77 guns.

Since the date of the last report the Swatara and Nantucket have been detached from this station and put out of commission, the former at Norfolk, in December, and the latter at Portsmouth, in July. The Powhatan, Richmond, Canandaigua, Wyoming and Saugus have reinforced the station.

The principal islands of the West Indies, the Spanish Main, and the coasts of Mexico and the Isthmus have been visited by vessels on this station; our interests have been protected by them during the blockade of the Orinoco by the Venezuelan Government; the cases of the Virginis and Mary Stuart have received such attention and such protection as circumstances justified; and they have aided in the surveys for an inter-oceanic canal between the Atlantic and the Pacific.

SOUTH ATLANTIC STATION.

Rear-Admiral William Rogers Taylor relieved Rear-Admiral Joseph Lanman of the command of the South Atlantic station on the 22d of May last.

No change has been made in the force on the station during the year, which consists of the Lancaster, 23 guns; Ticonderoga, 11 guns; and the Wasp; in all, 3 vessels with 33 guns. The officers and crew of the Lancaster, who had been absent for three years, were relieved in June by others sent out by the Portsmouth and Supply, and returned home in those vessels.

The Lancaster and Ticonderoga have cruised along the whole coast, visiting repeatedly the chief ports of that region, while the Wasp has ascended the Parana and Paraguay rivers as far as Asuncion, affording to Mr. Stevens, the United States minister, facilities for visiting that place, and has been cruising generally in the waters of the La Plata.

THE PACIFIC STATION.

The Pacific station, at the date of the last annual report, was divided into two squadrons, the north squadron, commanded by Commodore R. N. Stembel, and the south squadron, commanded by Commodore D. McDougal, with the whole under command of Rear-Admiral John A. Winslow. The extent and importance of this station were such that the propriety of dividing it into two separate commands was apparent. This has recently been done, and the divisions are now the North Pacific station and the South Pacific station. The limit and extent of these stations are as follows:

The North Pacific station embraces all that portion lying north of the equator, except so much of the west coast of South America and of the Isthmus as lies between the equator and Panama.

The South Pacific station embraces the west coast of the Isthmus and of South America lying between Panama and the equator, and the west coast of South America and the islands and waters of the Pacific lying south of the equator as far west as the 150th meridian, and includes, in addition, the coasts and sea-ports of Australia.

Previous to this division the following changes in command occurred. On the 28th of February Commodore McDougal, agreeably to the orders of the Department, relinquished command of the south squadron of the Pacific, at Callao, and returned to his home; and in March, Commodore Stembel, who had hitherto commanded the north squadron, was ordered to the command of the naval force on the whole station. In July, Rear-Admiral Winslow was condemned by medical survey, and, in consequence, detached from the command, and Commodore Stembel, in pursuance of orders given him, took temporary command of the Pacific station, August 16, of which he was relieved October 10.

On the North Pacific station, of which Rear-Admiral A. M. Pennock assumed command, at San Francisco, October 26, there are the following vessels: California, 21 guns; Benicia, 12 guns; Saranac, 11 guns; Narragansett, 5 guns; and the Saint Mary's, 16 guns; total, 5 vessels and 65 guns.

On the South Pacific station, of which Rear-Admiral Charles Steedman took command, at Panama, October 10, there are the Pensacola, 22 guns; Omaha, 13 guns; Tuscarora, 6 guns; and store-ship Onward, 3 guns; in all, 4 vessels and 43 guns.

The Ossipee, Mohican, and Kesake have been detached from service in the Pacific. The former arrived at New York November 18, and the others have been put out of commission at Mare Island. Orders have been issued withdrawing the Saint Mary's also, and she will return

to the Atlantic States. The Tuscarora, Omaha, and Be-nicia have been added to this station during the year.

The vessels in the Pacific have been actively cruising, and have shown the flag in almost every part of the station. Our interests among the groups of islands in the North Pacific have received special attention by frequent visits, and our citizens there and at other points assisted, as occasion required, to the fullest extent in our power.

INTEROCEANIC CANAL.

The United States having developed a preponderating commercial power upon both coasts of the North American continent, we are deeply interested in all movements aimed at the creation of new, or the deflection of ancient lines of traffic, and feel that we have become fully competent to take into our own control the commercial future of this hemisphere. It is now over three and a half centuries since the way around the Cape of Good Hope to the Indies was discovered; and it was only a few years later that the way around Cape Horn became known. Almost immediately many projects were initiated and efforts made to shorten these long voyages, and add to their security. At many points on the Isthmus, of over two thousand miles in length, which connects North and South America, enthusiastic explorers were confident of discovering eligible points for the construction of transit routes, by ship-canal or otherwise, from the Atlantic to the Pacific Ocean. For more than two centuries the routes by Tehuantepec, Honduras, Nicaragua, Costa Rica, Panama, Darien, and the Atrato have attracted the attention of navigators, geographers, and commercial men; but the problem was formerly regarded almost wholly in its relation to Spain, whose possessions extended over both coasts of America, or more recently in reference to European commerce. Only within the last quarter of a century has it been really studied in its more appropriate relation to the interest of the United States.

The paths of commerce seek the shortest, quietest, and cheapest possible routes of transit; and the discovery and development of America have greatly modified the ancient routes of the trade of the world, particularly since our own commerce with India, China, and Japan has become extensive. The great minds which direct the mercantile interest of Europe fully appreciate the changes which are taking place during the present century in the Asiatic trade. To grasp and control that trade has been the traditional policy of every commercial power. Russia has pushed her conquests in the East to the Chinese frontier, has constructed long lines of railways stretching eastward, and increased her trading fleets upon the Black and the Caspian Seas; England has increased her steam service, shortened her lines of transit wherever it was possible, built swift sailing-vessels, and multiplied her Indian railways; Germany and Austria are adding largely to their mercantile marine; and even Italy has pierced the Alps; all with the hope of finally controlling and occupying the pathways of commerce between the East and the West.

The present seems to be an opportune moment for us to take into serious consideration the reports of the surveys and explorations made upon the American Isthmus, with the view of solving, if possible, the engineering and commercial problems involved, and establishing water communication between the two oceans. It will be noted, in the physical structure of the continents of North and South America, that the meridian of New York is about that of the Isthmus of Darien, and that the Isthmus of Tehuantepec is near the longitude of Omaha, while a ship bound from New York to San Francisco is compelled, in rounding Brazil and doubling Cape Horn, to sail farther eastward than the entire direct distance between the two cities, and the countries of three-fourths of the South American and all of the Pacific coast are nearer, by steam or sail, to the ports of Europe than to the Atlantic harbors of the United States. But the Gulf of Mexico belongs to us and to our Atlantic commerce, and the great interior navigation of North America, which has its outlet through the Mississippi, stretches its arteries from the Alleghenies to the great lakes, and drains a region larger and richer than all Europe west of the Adriatic, and the resources and requirements of that great region, under the favorable circumstances of ship-communication across the American Isthmus, would soon appropriate and repay much of the trade of the East. No more powerful impulse could be given to the swift development of our southern and middle tiers of States, nor any greater boon conferred upon the valley of the Mississippi than such a connection with the Pacific Ocean; and certainly no more effective stimulus could be applied for the revival of the commerce of our Atlantic and Pacific States with South America and the East, the fostering of which demands, now that swift and costly steamships have almost banished sailing-vessels from the ocean, that no needless day shall be added to the time of their passage, nor an avoidable mile to the length of their voyages.

Moreover, the interest of land transportation between the Pacific and Atlantic States would be in no wise injured by the completion of such a canal. Many of the bulky yet valuable products of both sections, such as grain, wine, heavy machinery, and the like, will not now repay railway transportation over long distances, while a speedy and cheap water-carriage would add to the wealth and population of the Pacific slope as greatly to increase railway travel, and the transportation of more valuable and less bulky merchandise of all kinds. All the conditions of this great enterprise, the direct necessities of our commercial development, the self-evident economies of trade, and the dictates of board statesmanship and prudent patriotism, demand that the locality selected for the construction of the American interoceanic canal shall be the very best that the field affords, and the circumstances of our necessities and our position require that this shall be determined by the imperious dogma, that the route which is best for the United States must be best for the world. The route of the proposed canal, besides geographical position, should, if possible, be through a locality capable of developing local population, wealth,

trade, and agriculture, for those, in themselves, would be a protectorate and guardian of the great work, and would provide sufficient supplies, repairs, and other necessities to passing navigation, which, in localities less favored or more remote, could only be secured at great expense and under certain conditions. Points with less favorable geographical position must present either much less practical difficulty in accomplishing and maintaining the work, or it must be apparent that there, the work once accomplished, would be of a character vastly more convenient to ship-transit. The comparative narrowness of the land-barrier at Panama and Darien naturally warrants the inference that there it could most readily be pierced. Consequently, during the last few years nearly the whole Isthmus in that quarter has been examined by scientific expeditions sent by our Government, and almost every point, reported to possess peculiar advantages, has been more or less explored. The results, though certainly not such as the world had reason to expect from the favorable reports of the earlier but superficial and transient explorers, or the suggestions of both Spanish and local tradition, are certainly far better and surer than any heretofore obtained. But nothing short of complete success will justify us in pausing in our investigation until every possible route of the whole Isthmus which separates the two oceans shall have been sufficiently explored. If in the more southern and narrower parts of the Isthmus the proper local and topographical advantages for the execution of the work cannot be found, the claims of the routes which are geographically nearer the United States should be thoroughly explored, since, though necessarily of greater length, they lie more directly in the pathway of our commerce and development, and the mere obstacle of greater length of canal may be more than overcome, if it shall appear that it can there be constructed without encountering serious engineering difficulties, and that the advantages and probable requisites heretofore alluded to, and even the labor and materials required in the execution of a great engineering work can there be found.

Commander Selfridge, who conducted the previous surveys of the Isthmus of Darien, is now engaged in completing the final exploration of that Isthmus between Panama and the shoulder of South America.

Recent information favors the examination of the valley of the river Bojaya, lying some ten miles south of, and, in general, parallel to that of the river Napo, already examined. This completed, the entire Isthmus lying south and east of the line of the Panama Railroad will have been sufficiently examined to establish the relative difficulties of constructing a ship-canal, as well as the lines lying farther south, between the river Atrato and the Pacific Ocean.

The expedition to Nicaragua, destined for a similar purpose, is engaged upon the work assigned to it. An unlimited water-supply, at a summit of 106 feet above the mean height of the ocean, presents too favorable a feature to forego a close examination of the whole region. Difficulties, stated in the report of the chief of the Bureau of Navigation, delayed the progress of this survey; nevertheless a location from Lake Nicaragua to Brito, on the Pacific coast, is found to be more favorable than any hitherto known.

These two expeditions will probably close the surveys and explorations of all the possible routes of that part of the American Isthmus.

In a former report from this Department you were acquainted with the result of the topographical surveys made upon the summit, and the hydrographical surveys of both coasts of the Isthmus of Tehuantepec, by the expedition under command of Captain R. W. Shufeldt, whose report in detail, with accompanying maps, has been printed by order of Congress.

I recommend, for the reasons suggested, that the appropriations for these surveys be continued, until every practicable line has been surveyed and the whole subject investigated, to the end that we may have a complete knowledge and exhaustive information without which it is impossible to settle finally and wisely this great problem of national development.

THE NAVIGATOR ISLANDS.

In February last, Commander R. W. Meade made, in the Narragansett, an extended cruise among the islands of the South Pacific Ocean, in the course of which he visited the group known as the Navigator or Samoan Islands, which lies northeast of Australia, and almost north of New Zealand, and consists of nine islands, the largest of which is called Upolu. These islands are capable of producing in abundance cotton, sugar, and all the ordinary tropical productions. They are inhabited by a fine, muscular race, mostly Christianized, and of a higher order of intellect and cultivation than almost any natives of the Pacific Archipelago. The island of Tutuila, though by no means the largest, is the central island, and possessing the beautiful harbor of Pago Pago, is the key of the group. These islands lie directly in the track of commerce and steam navigation between the west coast of America and the islands and semi-continents of the East; and the Bay of Pago Pago, situated about midway between Honolulu and Sydney, affords not only far the best and safest, but absolutely the only land-protected harbor among the islands of the South Pacific. Its position, in relation to New Zealand, Australia, the Sandwich Islands, the ports of South America, and the Isthmus, and to San Francisco, makes it almost the necessary harbor for supplies, coaling, and repairs for all the trade and travel westward to Australia and Southern Polynesia, or returning thence to shores of America. Its great advantages for us are to be found in these conditions, and in the fact that it is in the direct line of trade from San Francisco, through the Sandwich Islands, to the East; that its location is plainly marked by the surveys of our exploring expedition and those more recently made; that it is easy of access, night and day, with a deep land-locked harbor, well protected from the force of hurricanes which sweep that portion of the Pacific, and from the dangerous ocean swell resulting therefrom.

As an available station for coaling and supplies for

our national and commercial marine in that part of the world, it is far the best to be found within a sweep of many thousand miles.

The native chiefs and people are well disposed, and exceedingly anxious to secure the benefits of our intercourse, and the recognition and countenance at least of our Government. Acting under his general instructions, with great judgment and skill, Commander Meade entered into the most kindly relations and intercourse with the authorities and people of these islands, exchanged the most friendly courtesies with them, and seems to have secured their friendship and confidence for our Government. He assisted them in framing friendly and proper commercial regulations, and procured from them a solemn and comprehensive agreement which gives us all the facilities for a station for coaling and supplies if needed, and invites and offers protection to every American interest, either national or commercial, asking nothing in return but our recognition and countenance, and requiring only the favorable action of our Government, to establish and maintain our interests and influence in the heart of the Pacific Archipelago. It is by no means the province of this report to discuss questions of foreign policy or to present any event even of the plainest interests or requirements of national commerce, but I cannot forbear to say that if we are not prepared to ignore wholly the imperative commercial needs as well as the splendid commercial opportunities in our Pacific States, and to yield also the opening avenues of Pacific trade to the comprehension and courage of more liberal, though more remote peoples, we should not neglect the opportunity thus afforded, at least to protect, if not to encourage, some of the American interests which are there struggling to establish themselves.

HYDROGRAPHIC OFFICE.

The work of the Hydrographic Office has progressed most satisfactorily during the past year, to the full extent of the means at its command.

The Department is gratified at the energy which has been displayed in this office, and is glad to state that the boards of underwriters, and those connected with commerce in our principal cities, seem fully alive to the importance of this branch of the public service, and to the necessity of its being placed on a footing with the similar offices of other maritime countries.

The preparations and outfitts for the survey in the Pacific Ocean have been completed, and every facility at the command of this Department has been given and every means taken to insure its success, and it is hoped that by this means much will be added to the hydrographic information of the world, and valuable accessions made to our stock of knowledge in the various branches of natural science.

The United States ship Portsmouth, detailed for this survey, is now on her way, and will commence operations upon her arrival in the Pacific Ocean, where she will be joined by the United States steamer Narragansett.

Too much stress cannot be placed on the importance of this work, so long neglected, and it is hoped that a sufficient appropriation may be granted by Congress for the proper prosecution of this survey.

I strongly recommend that the reasonable suggestions made by the head of this office, approved by the chief of the Bureau of Navigation, be acted upon, and especially that an appropriation for the purchase of a suitable building be granted, as the rented building now occupied is wholly inadequate. The nature of this work requires a building belonging to, and wholly under the command of, the Government, which can be arranged to meet the increasing wants of the service, and where the valuable and constantly increasing collection of plates, charts, and documents can be entirely secure.

SCIENTIFIC EXPERIMENTS ON STEAM-BOILERS.

Recent disasters of a serious character, resulting from the explosion of steam-boilers, have called renewed attention to the necessity of finding some efficient remedy for these distressing accidents so destructive to property and life. The universal employment of steam at the present day in naval as well as commercial operations, renders this a matter of extreme interest to all, and one demanding the serious attention of the Government. In December last, at the suggestion of private parties who were about to institute some experiments upon actual boilers at Sandy Hook, I appointed a board of engineers to attend and witness the result. Appended hereto is a copy of their report, which seems to indicate that much valuable information and perhaps a solution of the difficult problem may attend a further prosecution of the inquiry. Indeed, the information already acquired is deemed by those competent to judge, of much interest and importance. It is gratifying to know that the experiments which have led to the most reliable information hitherto possessed by the scientific world on this difficult subject, were instituted and conducted by an American institution, (the Franklin Institute, of Philadelphia,) under the patronage of our Government, over thirty years ago. Those experiments were detailed in two able reports, one made in January, 1836, on the manifestations of steam under various conditions, and its effects, as steam, upon a small model boiler constructed for the purpose; and the other, made some months afterwards on the strength of materials employed in the construction of steam-boilers. The former report was published in Ex. Doc. No. 162, first session, Twenty-fourth Congress; the latter, in Ex. Doc. No. 18, second session Thirtieth Congress, included in a special report of the Commissioner of Patents. It is to be regretted that the experiments thus auspiciously commenced had not been continued until a complete solution of the difficulties could have been obtained. No material advance seems to have been made in real knowledge on the subject since that time, and the great desideratum at the present day is a series of well directed experiments on actual boilers used in navigation. It was the employment of such boilers in the experiments made last season at Sandy Hook which was the means of producing the interesting results before alluded to. But the making of experiments on this scale is attended with too much expense and risk of capital to be carried on by private enterprise. It can only be accomplished under the patronage of the Government, and it seems to me that any reasonable outlay in this direction would be amply repaid in the increased security to our naval and commercial marine. Legislation regulating the inspection and management of steam-boilers must necessarily be imperfect under an imperfect knowledge of the causes which lead to explosions; and reliable knowledge can never be attained by silent reflection in the study, or by verbal and theoretical discussion, but only by actual trials on real boilers, under such conditions and circumstances as the present advanced state of engineering science and skill shall dictate. This Department has noticed with much interest that the subject has engaged the attention of Congress, and that a law has passed one House at its late session, providing for a continuation of experiments such as have been recommended. There are few things at this time, affecting the commercial and naval interests of the country, of more practical importance than this, and it is to be hoped that the pressure of business at the coming session will not cause the matter to be overlooked.

NAVY-YARDS.

I must again renew my urgent recommendation that our Navy-yards shall be developed and adapted to the new necessities of naval warfare. They are the resources of naval power, and like fortifications, if strong and capable, often deter other nations from lightly entering upon war with their possessors. At Mare Island we have an admirable site, with every natural requisite for a great

dock-yard. It is our only naval station on the Pacific, and it needs dry-docks and workshops, quay-walls, and other appliances to make it worthy of our great western coast, and to enable us to assert and maintain if need be our proper supremacy upon the Pacific Ocean.

At various points on the Atlantic coast, yards are admirably placed to utilize in time of war the vast naval resources of our great cities, with their dry-docks and ship-yards, forges, and machine-shops, their host of skilled workmen and immense store of material. These invaluable sites, acquired from time to time with so much difficulty, we shall greatly need in any time of emergency, and they can never be regained should they once pass from our possession. At Philadelphia, however, we have really two Navy-yards. The old establishment is very small, with narrow water front, and is greatly needed by the city for other purposes, while at League Island we shall soon, and cheaply, have retrieved an area of firm ground, larger than that now occupied by the old Navy-yard, and raised far above the highest water level. We cannot afford to maintain two navy-yards within three miles of each other; wise economy demands that one of them should be discontinued, and I would urge that Congress cause the old establishment to be carefully valued, and that a sum equal to the value thus determined should be appropriated to convert League Island into an efficient navy-yard, the sum so appropriated to be returned to the Treasury as soon as the new works shall be sufficiently advanced to warrant the disuse and sale of the old yard. A navy-yard of the first-class upon fresh water, perfectly secure from an enemy's fire, on the margin of our great coal and iron region, and having at hand the skilled labor of a great manufacturing city, will be a great source of naval power.

The Navy-yard at Norfolk is also of great value from its position and climate, enabling repairs and construction to be prosecuted in mid-winter, when the rigorous climate of the North sometimes forbids all out-door labor. This was once our chief Navy-yard, and I recommend that liberal appropriations be made to re-establish and multiply its resources.

I have heretofore spoken of the claims of the New London station on the liberality of Congress. Some of these are to be found in a good harbor, easy of access from all directions, and conveniently situated between two great commercial cities, an industrious and ingenious people whose labor is skillful and cheap, and a site for the station already acquired through the liberality of the State, to the improvement of which the Government seems to be virtually pledged. It is already a station of convenience to the service, and with moderate expenditure its use could be largely increased.

NAVAL PRISONS.

Corporal punishment having been happily abolished in the Navy, and punishment by fines being in great degree inapplicable, only imprisonment remains to be awarded by courts-martial as the punishment of enlisted men convicted of offences not deserving severer penalties. But the Navy has no proper prison properly to carry out such sentences. At our marine barracks are to be found a few cells barely sufficient for the police and discipline of the marine garrison, and wholly unfit for the confinement of convicts sentenced to protracted imprisonment. These cells are now our only resource when men under sentence are brought from our squadrons and stations. They are so insufficient in number and in accommodations that it often becomes necessary to place two men in one cell, and to expose the prisoners to rigors against which humanity protests. We are sometimes compelled to discharge old prisoners to make room for new comers; the ventilation and dryness of these cells are necessarily defective; and there are no means of employing the prisoners so as to diminish their expense to the Government, and to the improvement of their health, their morale, and their decency.

I recommend that a moderate appropriation be made to build a suitable prison at one of our marine stations, where the necessary guard and medical attendance may be had without expense, and where we may be able to give that care to the well-being and improvement of our prisoners which modern civilization everywhere demands.

REDUCTION OF THE NAVY.

I beg to repeat the recommendations of my last report in regard to the reduction of the number of officers in the naval service, and the manner of filling the higher grades; and to refer again to the suggestion there made for increasing the time of service for cadet midshipmen at the Naval Academy; and I would further suggest that, after the abolition of the grade of commodore in the manner proposed, Congress should, by law, provide a certain amount of actual sea-service to be served by an officer in each grade before he shall be eligible, in time of peace, for promotion to a higher one.

NAVAL PENSION FUND.

Statement of the number and yearly amount of pensions of the Navy on the rolls November 1, 1872, and the amount which was paid during the last fiscal year.

	On the rolls, November 1, 1872.	Yearly amount of pensions on the rolls, November 1, 1872.	Amount paid for pensions during the fiscal year ended June 30, 1872.
Navy invalids	1,495	\$142,227 5	\$49,442 85
Navy widows and others	1,763	275,706 0	295,186 57
Total.	3,260	417,933 56	444,629 42

At the last session of Congress a special increase of pensions was made by act of June 8, 1872, of 20 per cent. to those having lost a limb, or are otherwise disabled in a manner which is equivalent thereto. This increase has not been included in the above table, but will be as follows:

There are on the rolls 15 of the first grade, increase \$75 per year. \$1,125
There are on the rolls 22 of the second grade, increase \$45 per year. 1,050
There are on the rolls 196 of the third grade, increase \$36 per year. 7,056

Extra addition to the rolls by act June 8, 1872. 9,237

ESTIMATES AND EXPENDITURES.

The appropriations made by Congress for the fiscal year ended June 30, 1872, amounted in the aggregate to \$20,964,717.25; the actual expenditures for the same period, to wit, from July 1, 1871, to June 30, 1872, chargeable to that appropriation, amounted to \$17,694,655.76. This last amount will of course be increased by the discharge of existing contracts and liabilities incurred in distant parts of the world, but it is believed that when all demands upon the appropriation shall have been satisfied the actual expenditures will still remain more than \$2,000,000 less than the amount appropriated. The appropriations for the current fiscal year, commencing July 1, 1872, and ending June 30, 1873, amount in the whole to \$19,704,555.57. The amount of this appropriation, drawn up to the first of the present month, is \$3,215,573.07; this, reduced by the amount remaining in the hands of the various paymasters and agents of the Government, will leave \$5,000,000 as the amount actually expended from the current appropriations during the working months of the present fiscal year. A detailed account of the monthly expenditure of the appropriations of the fiscal year 1871-72, and for the present fiscal year, (1872-73,) to November 1, will be found annexed hereto.

ESTIMATES.

Pay of officers and seamen of the Navy	\$6,500,000 00
Pay of civil establishment in Navy-yards, etc.	338,321 00
Ordnance and Torpedo Corps	21,507 00
Coal, hemp, and equipments	1,500,000 00
Navigation, navigation supplies, etc.	134,500 00
Hydrographic work	217,800 00
Naval Observatory, Nautical Almanac, etc.	64,500 00
Repairs and preservation of vessels, etc.	3,775,000 00
Steam machinery, tools, etc.	2,400,000 00
Provisions	1,587,500 00
Repairs of hospitals and laboratories	40,000 00
Surgeons' necessities	40,000 00
Contingent expenses of various departments and bureaus	1,312,000 00
Naval Academy	193,458 25
Support of Marine Corps	1,177,311 25
Printing and binding	103,000 00
Naval Asylum, Philadelphia	51,650 00
	\$20,236,747 50

and to these is added the sum of \$2,146,210 for permanent improvements, current repairs of buildings, docks, and incidental expenses in Navy-yards, etc.

These estimates are somewhat larger than those which were offered last year, but the increase will be found, on examination, to be almost wholly owing to the imperative demands for improvements in our steam machinery, for several years past eking out by the use of old and sometimes imperfect materials, the requirements of which are elsewhere referred to, and to the obvious policy of enlarging and developing our

TORPEDO SYSTEM.

These cheapest but most powerful weapons of defence, called torpedoes by Fulton, who invented them, were at first little regarded, but their use is now established as a necessity of naval warfare. England, Germany, Austria, and even China are devoting much attention to their preparation and employment. This weapon seems to have an equal value to the United States. Our separation from the political complications of Europe produces a security which has resulted in notorious un-readiness to meet any sudden hostile emergency, which can come only from the sea, by an arm'd Navy in proportion to our strength or to the extent of our coasts. A well-developed system of torpedo warfare would, to some extent, possibly to a large extent, meet this condition of un-readiness. Naval construction has not yet even remotely indicated any floating structure which can withstand the destructive power of the modern fulminate, skilfully applied. While torpedoes are the cheapest of naval weapons, and within the means of the poorest nations, they are irresistible to the strongest, and best prepared. The idea, even, of their employment appeals so strongly to the imagination, that powerful fleets have been kept aloof simply by their supposed presence. During the war of our Rebellion means had to be constantly used for warding off or catching floating torpedoes, and the bottoms of Southern harbors were dragged for stationary ones, which were pulled from their places to the shore, or exploded from a safe distance. This earlier use, both for attack and defence, of these means, devised under the pressure of immediate necessity, and employed at the moment, has already been largely improved upon, and needs still further elaboration. Further experiments are requisite, and the use of methods of attack and defense in the same hands, in order that each may perfect the other.

Torpedo warfare is still in its infancy; but it is the infancy of the most powerful development, and it is especially the policy of the United States to foster its growth as a weapon adapted to our situation.

The attention bestowed upon this subject by our service has not been without much fruit. A "torpedo-boat", for instance, just tested at Newport, almost submerged, is controlled by human will acting at a safe distance. It advances, turns, or stops, at the touching of an electric key connected from the operator's hand by wire unrolled from the boat. This boat carries 500 pounds of explosive material, which can be fired on contact with an enemy.

This subject is in its nature not a matter for much public illustration, and I will at this time only point to the many instances in which torpedoes have played an important part in recent wars, and add, that the judgment of the most careful and experienced officers in our service is unanimous and strong in favor of the use of every means of enlarging and improving our knowledge of torpedoes, and of providing liberally for their investigation and use.

It would be a grave error, however, while advocating the importance of torpedoes as one means of attack and defense, to forget that these will not alone suffice for naval purposes.

The history of our own recent war shows some of the uses for naval vessels, in which torpedoes can take no part.

Men-of-war add to the security of our citizens in foreign countries, often semi-barbarous; they give protection to our commerce against illegal violence; they strengthen the hands of diplomatists at hostile or half-civilized courts. Situations are frequent in which the words of peace and of reason will only be heard when supported by the argument of the presence of a man-of-war's battery.

These considerations have already been frequently presented at length, and it is hardly necessary that I should pause to do more than call attention to them again.

I refer to the reports of the various bureaus, and the reports in the appendix, for more detailed and comprehensive information on many of the subject's mentioned, and others of interest to the service and the country; and, in conclusion, I again express my obligations to the able officers, chief clerks, and assistants of the Department, and of all its branches, for the great and unremittent attention and assistance which I have received at their hands.

GEO. M. ROBESON, Secretary of the Navy.

THE PRESIDENT.

SUPPLEMENT.

EXHIBIT OF EXPENDITURE CHARGEABLE TO NAVY APPROPRIATIONS.

Date.	Drawn.	Refunded.	Expend'd.
APPROPRIATIONS FOR 1871-72.			
1871.			
July	\$1,549,750 00		\$1,549,750 00
August	2,830,901 95		
September	1,409,280 59	\$1,000 00	1,405,280 59
October	1,152,620 00		1,152,620 00
November	2,114,458 03	1,040 33	2,118,467 70
December	1,202,444 25	5154	1,202,389 71
1872.			
January	1,381,807 31	39,608 01	1,342,199 30
February	1,373,618 81	80,421 89	1,293,196 92
March	1,394,157 95	101,453 46	1,283,704 49
April	1,667,147 58	423,954 70	1,243,192 88
May	1,166,996 73	46,479 69	1,120,517 14
June	1,646,283 69	488,818 61	1,157,465 08
Total	18,879,476 89	1,184,791 13	17,694,645 76
APPROPRIATIONS FOR 1872-73.			
1872.			
July	2,224,473 91		2,224,473 91
August	1,386,369 39	66	1,386,369 33
September	2,705,369 08		2,705,369 08
October	1,969,131 41	9,770 66	1,959,360 75
Total	8,285,343 79	9,770 72	8,275,573 07

Fort Sanders, Wyoming Territory.—At a regular meeting of Hasting Lodge No. 7, O. G. T., held on the evening of November 12, the following preamble and resolution were adopted:

Whereas, In his divine will it has pleased Almighty God to take from us our beloved Bro. Wm. McGee, who departed this life at Fort McPherson, on the 20th day of October, in the year 1872.

Resolved, That this narrowing our circle and removing from his sphere of usefulness in the very prime of life, our much loved brother soldier and friend, we humbly bow in submission to the will of him who doth all things for the best, and express our sympathy for the family of the deceased who have lost in him a true and loving son and brother. All whose privilege it was to know Brother McGee knew him to be a man of integrity and honor, a friend faithful and true.

Resolved, That a copy of this preamble and resolution be sent to the ARMY AND NAVY JOURNAL for publication.

LETTERS IN THE NEW YORK POST-OFFICE.

This following is a list of letters remaining in the New York Post-office on the dates given. These letters are retained in the New York Office for one month from date, after which they are sent to the Dead-Letter Office, Washington:

NOVEMBER 29.

Baldwin, Captain. | Moore, George H., Captain.
Genser, A. A., Colonel. | Wakeham, W. T., Captain.
Ashcroft, Chas., Captain. | More, John, Colonel.
Fish, Calvin, Captain. | Talmage, D. M., General.

THE NATIONAL GUARD.

FORTY-SEVENTH INFANTRY.—Colonel Austen has been detailed to wind up the court-martial presided over by Major Bush, resigned; a new court has also been ordered to convene this month, brigade orders designating Lieutenant-Colonel A. H. Rogers as the president. The regimental drills will be resumed after the 1st of January with a considerable degree of activity. The Supervisors of Kings county, Long Island, are making the usual mess of the \$10,000 Greenpoint armory appropriation, passed by the last Legislature of the State. This armory business seems to puzzle the supervisors. The State has not as a rule taken up this part of the military business, the building and providing of armories having heretofore been left entirely to the county and city authorities. The present excellent quarters of the Second division have been provided by the county, but the "little bill" of the Twenty-third opening the ball in the State Legislature. Immediately following the \$160,000 appropriation of this latter command came the \$10,000 slice for building an armory for the Greenpoint company or battalion of the Forty-seventh, as now represented by Company I, a company at present numbering some forty odd men. This company at one time, we thought, would form a good nucleus for a battalion or regiment for Greenpoint, but for some reason or other the company has greatly dwindled, and the long distance from the main body of the regiment has doubtless naturally affected the company. The supervisors last week, after going through the preliminaries of buying the land, advertising for plans, etc., adopted one plan, and voted to begin the work on the building immediately. But at a subsequent meeting, on motion of one of the supervisors, the motion was reconsidered, it not having been approved by the president of the board. The matter, therefore, is again at a standstill. Still the armory appropriation is a law, and therefore a fixed fact. As a last resort Colonel Austen has served a mandamus to compel the supervisors to do their duty in this matter.

THE NATIONAL RIFLE ASSOCIATION.—The Board of Directors of this association held its thirteenth regular meeting at 194 Broadway, Colonel Church in the chair. Among other business, the secretary stated that several of the military authorities at Albany and at Buffalo were moving for the establishment of rifle associations auxiliary to the National, and he thought that the Nationals, as the parent association, should take some steps toward the encouragement of such organizations.

The following resolution was subsequently adopted:

Any regularly constituted rifle association or rifle club in the United States, or any military organization, outside the limits of the First and Second divisions of the New York State National Guard, subscribing not less than \$20 annually to this association, shall be considered as being affiliated with it, and shall be entitled to the number of memberships in proportion to one for every \$1 paid, who shall be entitled to all the privileges of membership during the year. Every subscribing association is to annually select the persons to hold such membership from its regular members in good standing and send their names and addresses to the Secretary of this association to whom they shall also forward a description of their association, and a copy of its by-laws, together with a full statement of all rifle matches given under its auspices, which latter statements shall be published with the annual report of the association.

Hon. David W. Judd was then elected a director, after which Captain Wingate submitted several designs for badges to be worn by the members of the N. R. A., the intention being that they should be used as prizes at the inauguration meeting to be held next spring. General Shaler, as one of the committee appointed to wait on Comptroller Green to inquire when he would be ready to pay the appropriation of \$5,000 authorized by the Legislature for the city to pay toward the building and purchase of a rifle range, verbally reported that he had seen Mr. Green, and that that gentleman had decided that the matter properly belonged to the Board of Apportionment. Consequently he called on Mayor Hall, who had volunteered the preparation of a resolution to lay before the Board of Apportionment, and that the matter was now in a fair way to be carried out as originally intended by the act of the Legislature. Some other matters of no public interest were then discussed, and the Board adjourned.

The "VETERAN GUARD" of the SEVENTH REGIMENT met at the armory of the regiment on Monday evening last, General Lefferts presiding, about eighty members being present. The Committee on Uniform made quite a lengthy and interesting report through its chairman, Colonel Wm. Pond, and presented a very handsome blue uniform, and a less elaborate one in gray, with several styles of uniform hats. An informal vote was taken, and the majority seemed to favor the gray; but, as only about half of the members of the Guard were present, the final vote was by resolution deferred until the annual meeting in January, at which time it is to be hoped a full representation of the corps, which now numbers 160 members, will be present. The Committee on By-laws reported a code of regulations for the government of the battalion, which were adopted in part, some sections being laid over for future consideration. Messrs. Loutrel, Tuthill, and Burris were appointed a committee to nominate an executive committee, secretary, and paymaster (or treasurer), to report at the meeting to be held on the second Monday in January.

The members of the Veteran Association should now come forward and increase the roll of membership to 250 members at least. Those joining during the coming month will have a voice in the selection of the uniform and the election of the officers to command the corps.

SEVENTH BRIGADE —A SEQUEL OF THE MORRISIANA SCANDAL.—This so-called brigade, comprising a regiment, has been somewhat unfortunate of late in its efforts to attract public attention; and although the JOURNAL has carefully avoided taking sides in the internal quarrels of the regiment, it has been compelled to criticise pretty sharply the conduct of the brigadier, in his endeavors to hush up a notorious scandal by denying its existence instead of boldly removing it. In a late issue we printed his remarkable order concerning the Morrisiana scandal. Its fitting sequel appears in the following precious document printed in the form of a military advertisement in the issue of December 1 of a well-known Sunday paper of this city.

At a meeting of Companies A and G, of the Third regiment, N. G., S. N. Y., held at the companies' armory on Monday evening, November 4, 1872, a committee of three members from each company was appointed to draft resolutions to express the views of the members of the company on the action taken by Colonel John G. Fay, concerning the late disturbance on the Harlem railroad, on the 26th of September last. The committee at a subsequent meeting reported the following resolutions which were unanimously adopted and ordered to be published in the Sunday *Mercury*:

Whereas, Colonel Fay has at different times, in our opinion, shown an unfairness toward Companies A and G, and especially made use of the trumped-up disturbance on the Harlem railroad caused by a few disorderly men, to make a public thrust at the characters of the officers and members of Companies A and G, therefore be it

Resolved, That we consider it our duty as men to protest against his proceedings concerning us as a body; and that we regard his ostentatious display of authority, in putting the officers, non-commissioned officers, and privates under arrest, swearing in a company of soldiers as special constables and, in addition, calling on the police force of Morrisiana to assist in carting our arms to the prison cells of the Town Hall, an entirely uncalled for, and an act no soldier would be guilty of.

Resolved, That if there has been intemperance in any company of this regiment, the colonel ought to have set a better example than by visiting saloons and drinking with enlisted men at Tarrytown and other towns, after forbidding his line officers to drink with enlisted men.

Resolved, That as citizen soldiers we feel a pride in doing our duty when called on, no matter how arduous; all we require is a soldier at our head to command obedience and respect, without which no regiment can exist.

Signed,
JOHN HARTMYER,
ROBERT SAUVAN,
CHAS. HARTWIC,
LOUIS DIEHL,
CASPER HARTMYER,
JOSEPH ZUGNER.

proud of his achievement. When the brigadier-general ordered him out he flatly refused to go, saying he had a right to stay as a member of the Board of Audit till it was adjourned. Will it be believed that the complaisant brigadier actually adjourned the meeting to oblige the captain, and that the latter then graciously consented to go? Such are the facts. Mark the sequel. The brigadier-general perceived that his pet, Sauvan, had got into a bad scrape, if the facts became known. Coming on the heels of the Morrisiana scandal, the matter looked ugly. Accordingly he adjured every one present not to speak to any one about it. The colonel, however, though he again obeyed orders as regards speaking, wrote a formal statement of the affair next day to his commander, concluding with these words: "I have the honor to request that the brigadier-general commanding Seventh brigade will take such prompt and effectual measures in this matter as justice demands and the laws and regulations governing the militia forces of the State of New York require."

This was the 14th of November last. To this hour the brigadier has done nothing whatever, not even put the captain under arrest; has prevented the colonel from righting himself in any manner, and actually allowed the captain to command his company at the Yonkers parade on Evacuation Day. Is such a man fit to hold a commission in the National Guard? The colonel's enemies in the regiment say, "Why does he not resign?" Could any man with self-respect give way to a combination of insolent inferiors, tacitly encouraged by an incompetent superior? In a late issue we wondered exactly where the trouble lay with the Third. It is plain enough now. Any colonel would have an ungrateful position between an absolute, mutinous "veteran" on one side, to abuse and backbite him on every occasion, and finally to strike him, presuming, doubtless, on his age and infirmity, and on the other side a brigadier, whose chief anxiety is, "Please, don't fight, children; it racks my nerves all to pieces."

We hope that Colonel Fay will stick to the regiment and do his duty in spite of all obstacles. Brighter days are in store for the National Guard, we hope. The Governor elect being a thorough soldier by education, we hope to see the Military Code of our State reformed next year by making discipline a possibility, and preventing the other possibility of an officer striking his colonel unrebuked, and a brigadier-general quietly allowing and tacitly encouraging the mutineer.

These are the facts, so far as we can ascertain them. We do not by any means think that they relieve Colonel Fay of criticism. Whatever the difficulties an officer has to contend with there must be some lack of decision on his part when he can be subjected to such treatment. Insubordination cannot rise to these proportions when it is properly dealt with at the start.

VARIOUS ITEMS.—It is announced that the Eighth regiment New Jersey National Guard (colored) has completed its organization by the election of officers. Geo. B. Carse, of Camden, is colonel; Geo. A. Sagers, of Elizabeth, lieutenant-colonel, and Geo. Russell, major....On Monday evening, Nov. 25, Priv. Frank L. Richardson, of the Twenty-second, was unanimously chosen second lieutenant of Company H, Thirteenth Infantry....The Newark, N. J., new armory building has been completed. The entire cost of the building, as originally purchased and improved, is \$109,000....A Toronto, Canada, correspondent of the New York *Herald*, in speaking of the proposed invasion of New York some hundred years hence by the "terrible Canadians," says: "A hundred years from now, a mere bagatelle in the life of a nation, we may be as little able to withstand an army of a million of these Scythians of the future sweeping down on our rich cities as the Romans were to stop the sweep of A'rie and his Goths. A century hence our Seventh regiment will have grown so utterly enervated that carriages will be needed to take them on parade. The privates will be laid up with the rheumatism and the officers with the gout. Then these terrible Canadians, observing frugal living, sound sleep, and healthful labor, will start out some fine morning and enter New York by the St. Nicholas boulevard, driving our goaty and rheumatic *garde nationale* in their carriages through the Central Park, and capturing them in a body on Fifth avenue"....Mr. Chas. Sands, of Company C, November 30, was elected captain of Company I, Twenty-third Infantry, vice Stevenson, resigned. Captain Sands held three commissions in the Army during the war, and was a very efficient officer. On December 3, First Sergeant T. Jeff. Stevens was elected second lieutenant of Company C, vice Zogbaum, promoted....Company D, Thirty-second, will entertain its friends in its usual happy style, by a *tanz kraenzchen*, on January 30....First Lieutenant Celestin Simon, Thirty-second, has tendered his resignation. Sergeant-Major Spitzer, we hear, is looking for the office....The National Guard Riding Club of Williamsburgh assembled at Polhemus's Equestrian Institute last Sunday morning, and had a very satisfactory drill under the command of Lieutenant Bertsch, the instructor....A correspondent asks: "First, Where the Adjutant-General's report for 1871 can be obtained? Second, What right Brigadier-General Varian has to change the numerical order of the commands in his brigade? It seems to me irregular and unfair to deprive the First Infantry of the right of the line and place it almost on the left. If General Ward were to give, say, the Seventy-first the right of his brigade and remove the Twelfth there would no doubt be some complaint, and yet General Varian has done a precisely similar thing." 1. In reply we would state that the Adjutant-General's office, Albany, is the only place we know of where those reports can be obtained. We do not think they are on sale. 2. The Third brigade commander, we understand, has authority from General Headquarters as to the numerical arrangement of his brigade, but none from General Upton. The First, however, as well as the other portion of the brigade, seem well satisfied with their respective positions in column, the former command seeming willing to accept any arrangement to remain in the famous Third brigade of the First division....On Saturday evening the members of Com-

pany H, Thirtieth, under the command of Lieutenant Dillweier, an accompanied by the regimental band, serenaded their captain (Louis Bossert); after which they were invited to partake of chickens, hassenpfeffer, and Rhein wine, but before the waiters and teeth were called into requisition, the first sergeant, Emil Bausch, on behalf of the company, presented the captain with an elegant (new regulation) sword and belt; whereupon his father-in-law handed him a solid gold watch and chain. The gallant captain received all these presents like a soldier and a son-in-law. After the attacking party were regaled by the captured hero, Colonel Roehr delivered an eloquent address touching the subject in question and other matters relative to the citizen soldiers, concluding with a toast, wishing prosperity to the National Guard.....The First Infantry we trust is not quite as backward as the orders which reach the JOURNAL, for in that instance the regiment is far less lucky than its adjutant.....The Fifth, Colonel "Charlie," is strongly agitating either a trip to Albany or Washington this winter, on the occasion of the inauguration of General Dix, in January, or General Grant, in March. While we would wish to witness a handsome display of the Fifth in either of these cities, we would not wish to see a regiment of this character march through even the streets of New York without overcoats during this season of the year. The Fifth, like most regiments, is without either overcoat or knapsack; the men we know will not purchase them, nor will the State furnish them. It therefore remains for the regimental colonel or somebody to foot the bill. Who will do this aside from the transportation? Perhaps the N. G. R. C. will fix this little matter; but, unless it is done by somebody besides the Fifth, the regiment will remain home sure. The new armory up town does not meet the approval of the majority of the men, who live on the east side of the city down town. Colonel Spencer should have tried to secure some building near the homes of his German constituents.....The Sixth, like the Fifth, is in the ascendant, as far as the armory question is concerned. The regiment, however, we think, will do better at its present headquarters than at Tammany Hall. In securing one of the Ninth's most capable officers to fill the second position in the regiment, the Sixth did a good thing, and Lieutenant-Colonel Van Wyk exhibited a good disposition to improve the service by accepting. The Sixth, or any regiment of its character, will always be benefited by the introduction of just such military talent.....The Seventh is preparing for rifle practice this winter in the basement of the regimental armory. Under the supervision of Major Smith, targets, etc., are being erected, and a range of some sixty yards will soon be ready for use. Meanwhile, company drills continue. The "boys" say that last week they got "square" on Philadelphia for the never-to-be-forgotten march of the summer of 1870. The "First Penn. boys" will have to decide that.....The Eighth is growing stronger every day under the influence of a good commander and elegant quarters. The question of retaining this armory is still unsettled; but the ten years' lease is said to be too firm to be broken, and the lessee is rich enough to wait for his rent. Adjutant Hill continues in ill health, but, like a good soldier, will not give up his duties as the colonel's executive officer. He is very popular throughout the regiment. Lieutenant-Colonel Dunn, it is reported, will soon retire from the regiment, he having accepted the position of engineer on the staff of the Governor elect. The drum and fife corps hold its ninth reception at the armory on Monday. The company should have looked into the matter before re-electing its commandant. The fifth annual reception of Company H of this regiment will be held at Apollo Hall December 16.....If Captain Spencer, of the Ninth resides out of the State, he has no right to a commission in its National Guard; and Colonel Braine's action, aside from any personal objections to the officer in question, is strictly military.....The Eleventh is so quiet that we begin to doubt that it really has an existence. Yet the building of the new quarters for the regiment at Centre Market continues.....The Twelfth is progressing most favorably in its drill by division; and the inducements offered by its general commander, Colonel Ward, are having an effect on recruiting. Still, in our opinion, the "Old Twelfth," with its splendid record, eligible quarters, handsome "field," and active adjutant, not mentioning its numerous, well-posted line, should fill up without any pecuniary inducement.....The Thirteenth is moving for a new armory, and the members are circulating a petition for signatures among the taxpayers of Kings county, and have thus far received many thousand names, representing millions of dollars. The armory, we are informed, is now a fixed fact.....The Fourteenth is drilling, as well as "hopping" by company. Major Schurig is the new field officer, but who its new colonel or adjutant will be we have not learned.....Of the Fifteenth (battalion) we hear nothing new. The Twenty-second give another band concert at the regimental armory this (Saturday) evening. A large and fashionable attendance is assured. The regimental reception at the Academy of Music is now the principal topic of the regiment.....The Twenty-third will open the gay season at the Brooklyn Academy on the 16th inst. The prospects for elegant decorations, toilets, and handsome women is exceedingly great, and almost too dazzling to even contemplate. We hear that two companies of the regiment have been consolidated, and that Captain Manning will assume control of the consolidation.....The Twenty-eighth mustered in a new company on Thursday evening in the presence of the entire regiment.....The Thirty-second is quietly working, as events most assuredly indicate.....The Forty-seventh may go to Washington, and may not. It is merely a matter of money, you know.....Elsewhere we review the Greenpoint armory question.....The Sixty-ninth has commenced drills by battalion before properly devoting scarcely any time to company, etc. The Seventy-ninth has taken a similar false step. The Seventy-first, under Colonel Vose, is gaining every day.....The Eighty-fourth has its colonel again at its head. Company I, Captain McKinley, gave a ninth anniversary ball at the armory on Thursday evening.....The Ninety-sixth is still alive. Colonel Stauff will save it yet.....We have received a letter from Brigadier-General J. P. Bankeon, N. G. of Pennsylvania, in reply to the criticisms on General Provost, of the First division N. G. of Pennsylvania, which we last week transferred to the JOURNAL from a Philadelphia paper. We regret that the pressure of Department reports prevents its appearance this week. We have no desire to do injustice to the division or its commander, and shall be glad to give them the benefit of the defense which General Bankeon has volunteered, as soon as we can make room for it.

SEVENTH INFANTRY.—The first of a series of six band concerts was given on Saturday evening last at the regimental armory, and despite the weather and keenness of the air was exceedingly well attended. The regimental band under Mr. Grafula discoursed some excellent music, many of the selec-

tions being new to the delighted listeners, and appreciated accordingly. These concerts, aside from the music, are exceedingly interesting, both musically and socially.

THE WASHINGTON ARTILLERY.—This organization of the District of Columbia, which made so creditable a display in the May parade, says an exchange, has received orders to return their pieces to the Government authorities, and, as no request or action has been made by the district militia officials for their retention, we may conclude that the loss of this effective branch of the militia is considered of no account.

The battery was organized in the early part of the year and brought to its present efficiency under the command of N. G. Starkweather, the architect, to whose thankless endeavors the success of the company is ascribed. With the first step of organizing General N. P. Chipman lent a ready and effective assistance. He gave the officers encouragement when the undertaking became burdened with responsibilities, and undertook solicitations, of the kind district authorities had both neglected and failed in, relative to obtaining the guns and equipments of a four-gun battery. The pieces were loaned with the understanding that a return should be made at an early day following the May parade, or on a contingency that the Territory purchase them. Every one is familiar with the action of the Legislature of last session as to militia matters. The failure to supply a sufficient fund to purchase the pieces was alleged to have been owing to an opposition on the part of the colored delegates who had resisted the rough treatment the colored company received in their accommodations at the armory. Such charges called forth a committee of investigation whose doings resulted in finding them better quarters. The company have been to the expense of uniforming, without receiving assistance of any kind from the Territory, and have on various occasions, when regularly ordered, paraded without having received compensation therefor. Inauguration day approaches, when it is to be expected that the district militia will take no insignificant part. As the visitors from other States are to judge of the character of the organization at the seat of Government, the intervening time may be usefully spent in considering and executing the laws relative thereto.

LOUISIANA MILITIA.—General Orders dated November 13, issued from the headquarters of this State, announce the appointment as Adjutant-General of the State, of Colonel Henry Street, late Adjutant-General First division Louisiana State militia, with the rank of brigadier-general, vice W. P. Harper, resigned. Regarding this appointment, the New Orleans *Republican* says: "In the appointment of Colonel Street the Governor has recognized the merits of an efficient and worthy officer. Colonel Street was for some seven years before the war a member of the famous Seventh regiment of New York. He entered the service of the United States as an officer of the Thirteenth New York State Volunteers in 1861. In 1862 he organized a company of the marine artillery under Colonel Howard in the Burnside expedition to the Carolinas, and for the last six months of its service was in command of the marine artillery. In 1863 he was ordered to this department and commissioned lieutenant-colonel of the Seventy-seventh colored infantry, which he commanded up to the time of its muster out of service. He was appointed Adjutant-General of the First division Louisiana State militia in October, 1870, which position he has held up to the time of his promotion. For almost all of merit that there has been in our militia system, it is indebted to Colonel Street, and if retained in his present position under the new administration, we know he will organize a soldiery worthy of our State and people."

MR. LAY'S TORPEDO-BOAT.

Mr. Lay's boat, the trial of which we described last week, as it appeared when resting on the ways ready to be launched for the experiment, is a cigar-shaped craft of boiler-iron, twenty-five feet long and pointed at both ends. At the stern is visible a screw propeller, and in the space beneath the sloping shell, forward of the screw, is the rudder, turning on a vertical post through the centre, instead of one end, of the rudder-blade. From the top of the shell rise two iron rods, near the bow and stern respectively. To the tops of these, shielded lanterns may be fixed at night, enabling the navigator on shore to observe and direct the boat, while she remains comparatively invisible to the enemy. The bow contains a chamber for an explosive charge to be used when the boat itself is to be sacrificed for the destruction of an enemy's vessel; and if the charge is to be exploded by contact, as appears most suitable under the circumstances, percussion caps may be affixed to the bow-tip itself, and to several nipples provided for the purpose. On other occasions torpedoes may be carried, as was the case in this trial, at the end of poles attached to the bow, and they may be exploded, to destroy small craft or remove obstructions, without detriment to the torpedo-boat.

From the middle of the boat's bottom a double telegraph cable consisting of two insulated copper wires enclosed together in a gutta-percha coating, proceeds to the galvanic batteries of the navigator. These comprise twelve Bunsen cups, enclosed on the present occasion, in a wooden case resembling that of a hydrant. On the top of this case, which forms a convenient table, are the dials and keys or levers by which the operator makes and breaks or reverses the currents of electricity passing over the two wires already mentioned. On one of these is marked at opposite points the words *port* and *starboard*, on the other *stop* and *start*. The intermediate position between port and starboard is one in which the key or lever completes no circuit. It is marked *steady*.

This is all that can be seen beforehand. The boat having safely slid into the water, and being fairly afloat, the signal was given to the operator to start the engine, and the little craft, her light greenish back scarcely visible above the water, moved away at the rate of about six knots an hour. The course was taken westward down the harbor, and maintained in this direction for about one-third of a mile; then several turns were made to port and starboard, the boat obeying with great promptness the commands of the navigator, who stood on the shore watching the boat through glass, and giving his orders to the operator at the dial. With equal promptness and ease, the engines were stopped or started at will. The boat can move in any direction except backward. There is no way of reversing the engines though this could be provided if it were sufficiently important to justify the extra mechanism required.

After the complete control of the navigator over the movements of the boat had been demonstrated to the satisfaction of all present, the order was given to return, and the boat came back with perhaps slightly diminished speed, and ran toward an old launch moored near a cluster of piles opposite the fort. It was intended to explode a torpedo against this launch, but a miscalculation of the course, or an unexpected eddy around the piles, caused the boat to swerve a little and it was evident that she would neither strike the launch nor be able (by reason of the mooring rope) to pass between it and the piles. The engines were instantly stopped and in a minute or so the boat had drifted clear, when she was started again, and this time struck the launch fairly, exploding the small torpedo carried at her bow. Some splinters flew, but the damage inflicted was not clearly visible, and as it had nothing to do with the question under trial, no one cared to inquire into it. The great point was the controllability of the torpedo-boat, and this was triumphantly demonstrated. Questions of speed, power, and method of attack are important; but they are mere details of expense or policy in construction and management.

The party then partook of an elegant collation at headquarters, after which it was announced that the interior of the torpedo-boat could be inspected. We shall not undertake without the aid of drawings to explain to our readers the somewhat complicated details of mechanism and arrangement. It will be sufficient to point out the leading features of the plan.

The boat is divided into compartments. At the bow is the compartment intended for the explosive mixture. Next follows a compartment containing strong wrought iron flasks filled with liquid carbonic acid. The pressure in these flasks is 600 pounds per square inch, but they are tested when manufactured, to bear 1,700 pounds. They contain when charged about 400 pounds of acid. In the next compartment is the reel of wire cable, which is paid out through the bottom as the boat moves. This chamber is accessible to the water; but the tight bulkheads on either side prevent the entrance of water into either of the adjoining compartments, except in one place where an adjusted cock, open while the boat is moving, and closed when she stands still, admits water into an iron water-bottom under the flasks of carbonic acid, at a certain rate, just enough to preserve the uniform flotation of the craft, which would otherwise rise further and further out of water as the wire cable was reeled off.

Forward of this reel compartment is that in which the driving and steering machinery is located. This consists of two electric batteries, "reducers," for the carbonic acid gas, and a pair of oscillating engines. Still further forward is the mechanism for steering, which will be presently explained.

The throttle-valve is opened or closed by the operator on shore in this way. A current is made through one of the wires in the cable, having its ground connections in a copper plate sunk in the earth near the battery, and a copper plate on the boat, in contact with the sea-water. This current is conducted through a small electro-magnetic apparatus, in which it determines the movement on the principle of the galvanometer, of a central armature. When the current is reversed, the direction of this movement is reversed; and in this way the course of a strong current from one of the boat batteries is directed upon one of two helical electro-magnets. The movement here produced is exactly on the principle of the ordinary telegraph machine. It operates a valve admitting the high-pressure gas behind a small piston, the movement of which opens the throttle-valve proper. A reversal of the shore current changes the route of the local current, and in a similar way drawing the small piston back closes the throttle and instantly stops the engine. The apparatus for steering embodies a similar principle, only that the alternate action of the helical magnets is made through the change of a valve, to admit carbonic acid gas to one or the other of the two small pistons, the motion of which moves the rudder arm right or left, putting the helm hard "up" or "down." When the steering shore-current is not reversed, but interrupted altogether, the rudder assumes, by virtue of an ingenious arrangement, the medium position of "steady."

We have told how the gas is carried in liquid form. There is enough of it to drive the boat two miles. When it expands as vapor a great loss of temperature is the result, and this might diminish the pressure seriously. This evil has been experienced in other carbonic-acid motors, in some of which the volatilization of a part of the liquid froze the remainder, causing the pressure to cease altogether. It is counteracted in this machine partly by the large size of the wrought-iron reservoir or flask, partly by the method of conducting the gas past the reel compartment to the reducers, viz., through small pipes running along the outside of the shell, and thus exposing a large surface to the water, which imparts some heat to the gas within. The same end is facilitated by the use of the reducers. These are small flasks in which the gas is expanded before entering the engine. The pressure in the original flask is, as has been said, 600 pounds per square inch, but this is reduced before entering the engine to 90 pounds.

It will be seen that there is no attempt in this ma-

chine to employ electricity as a motor, except in the subordinate and light work of opening valves. Even this in the case of the throttle is performed by the gas. What the shore-currents do, is to determine the route of the local currents, and through these the motions of the rudder-pistons and the throttle-piston. Every expert will see that this plan offers greater advantages of ease and certainty of operation than any in which electricity alone supplies the power either of driving or steering, or both.

FACTS FOR THE LADIES.—Mrs. Mary Sanders, Jersey City, N. J., has used her Wheeler & Wilson Lock-Stitch Machine since 1863 constantly, on all kinds of sewing, without repairs, and broken but one needle (accidentally); would not sell it for \$1,000 if she could not get another. See new Improvements and Woods' Lock-Stitch Ripper.

MARRIED.

[Announcements of Marriages should be paid for at the rate of five cents each.]

ROBINSON—DARLING.—In New Britain, Conn., Tuesday evening November 26, 1872, at the residence of the bride's uncle, A. W. Spaulding, by the Rev. J. H. Denison, First Lieutenant Levi H. Robinson, U. S. Army, to MARY A. DARLING. (No cards.)

KING—YORKE.—At "Avoca" Plantation, Carroll Parish, Louisiana, the residence of the bride's parents, on Wednesday, November 20, by the Reverend Charles B. Dana, of Natchez, CHARLES KING, First Lieutenant Fifth U. S. Cavalry, to ADELAIDE L., daughter of Captain Louis S. Yorke.

LORD—EATON.—In San Francisco, November 19, at the church of the Advent, by Right Rev. Bishop Kip, Jas. H. Lord, U. S. A., to FANNIE T. EATON, of San Francisco. (No cards.)

ENGELMANN—WALLEN.—At Christ church, New York city, December 3, by the Rev. Dr. Hugh Miller Thompson, CHARLES PILING ENGELMANN, of Bradford, England, to ANNA CANFIELD, eldest daughter of General H. D. Wallen, U. S. Army.

HOUSEL—CANDOR.—On November 28, by the Rev. J. C. Watson, D. D., Lieutenant Louis V. Housel, U. S. Navy, to Miss MARIE E. CANDOR, of Milton, Pa.

DIED.

COLHOUN.—On Saturday, November 30, JOHN COLHOUN, Commodore, U. S. Navy, in the 70th year of his age.

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REFERENCES, BY SPECIAL AGREEMENT,
General Sherman, U. S. Army, and Indy, Washington, D. C.; Admiral David D. Porter, U. S. N., Washington, D. C.; Major-General G. G. Meade, U. S. Army, Philadelphia; General Hartman Bache, U. S. Army, Philadelphia; Brigadier-General L. N. Palmer, U. S. Army, Omaha, Neb.; Brigadier-General L. P. Graham, U. S. Army, San Francisco, Cal.; Brigadier-General Wm. M. Graham, U. S. Army, Fort Hamilton, N. Y.; Mrs. Admiral Dahlgren, Washington, D. C.

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